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# Aviation Survival Technician First Class



**U.S. Coast Guard  
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QUESTIONS ABOUT THIS TEXT SHOULD BE  
ADDRESSED TO THE SUBJECT MATTER SPECIALIST  
FOR THE **AVIATION SURVIVAL TECHNICIAN** (AST) RATING

## References

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### **Selected References**

This pamphlet contains original material developed at AVTECHTRACEN Elizabeth City, NC. The references used to develop this pamphlet are listed throughout the text under the corresponding performance qualification number. A complete list of these references is provided in Appendix C.

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### Introduction

The purpose of this pamphlet is to provide guidance and references to assist you in completing the AST1 Performance Qualifications and the End-of-Course Test.

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### Important Note

This text has been compiled for TRAINING ONLY. It should NOT be used in place of official directives or publications. The text information is current according to the references listed. You should, however, remember that it is YOUR responsibility to keep up with the latest professional information available for your rate. Current information is available in the Enlisted Qualifications Manual, COMDTINST 1414.8 (series).

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### How to Proceed

This pamphlet contains assignment objectives and syllabus objectives which are used to describe the tasks you will need to perform to satisfy the requirements of the performance qualifications.

- For the assignments: Read the text and answer the self-quiz at the end of each assignment.
- For the syllabus: Read the performance, then read the syllabus performance objectives and refer to the applicable references listed to perform the task.

-The initial line ( \_\_\_\_\_ ) in the syllabus portion is used to keep track of each task you have completed. This entry should be completed by a petty officer at least one pay grade higher than the student.

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### End-of-Course Test (EOCT)

To prepare for the EOCT, read the assignment objectives and carefully study the information contained in the text. You should also review the self-quiz for each assignment along with the pamphlet review quiz. Answers and references are found on the page following each quiz. Remember that these questions are only samples of the types of questions on the EOCT.

The syllabus “performance” objectives will NOT be tested on the EOCT.

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Continued next page

## Notice to Student (Continued)

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### Performance Qualifications Sign-Off

As PROFICIENCY in each performance qualification is demonstrated, the DATE and INITIALS columns of the Record of Performance Qualifications (CG-3303C-19, Tab-1) should be completed by your supervisor. This should be the same set of performance qualifications used to qualify for E-5. Also, a “Notice to Supervisor” page is included to provide guidance for your supervisor. Ensure that your supervisor reads the instructions on that page. Also, Tab-1 should be used as your permanent record documenting the completion of each performance qualification. It is up to YOU to ensure that this documentation is complete in order to be considered eligible for the Service Wide Exam (SWE).

This pamphlet was developed as a guide to assist you in completing your performance qualifications. You should **USE IT**.

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### Performance Qualification Numbers

The performance qualifications beginning with a “6” are the requirements for qualifying for E-6. Also, performance qualifications ending in “c” are common for all aviation ratings. The assignments need not be completed in any specific order.

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### Student Feedback Form

A student feedback form (Appendix D) is provided for you to submit recommendations to the subject matter specialist. As you read the training material, you may have comments, such as

- suggestions for adding or deleting information,
- notations of errors in the text (include page number and your reference material), or
- questions about the text or a practice exercise.

Write your comments in sentence form on Appendix D. Tear it out of the pamphlet and mail it through your unit’s mail room. The subject matter specialist will review all submissions received.

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### SWE Study Suggestions

Servicewide exam questions for your rate and pay grade are based on the Professional and Military Requirements sections of the Enlisted Qualifications Manual. If you use the references listed in your rating section of the Enlisted Qualifications Manual, COMDTINST 1414.8 (series), you should have good information for review when you prepare for your servicewide exam.

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### Introduction

The purpose of this pamphlet is to provide guidance and references to assist the student in completing the AST1 performance qualifications and the EOCT. It also identifies what the student is expected to know and demonstrate for each performance qualification.


### NOTE

This text has been compiled for TRAINING ONLY. It should NOT be used in place of official directives or publications. The text information is current according to the references listed to date.

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### Supervisor Guidelines

Supervisors should follow the guidelines provided below to improve consistency of the training process:

- The syllabus portion of this pamphlet contains objectives for each performance qualification. The student should be able to demonstrate proficiency in each of the objectives in order to meet the requirements for the performance qualification. The supervisor should use the syllabus to determine if the student is proficient in each performance qualification.
- An initial line ( \_\_\_\_\_ ) is provided to keep track of each objective the student has completed, and should be initialed by a petty officer at least one pay grade higher than the student. The initial line also provides a quick way to chart the student's progress and allows you, the supervisor, to assess the student's training needs and to plan accordingly.
- The supervisor should provide the necessary information for the scenarios in the syllabus objectives requiring this information.
- Also, the student should be using the same set of performance qualifications used to qualify for E-5. This is to ensure that the supervisor is aware of any important information such as previously waived quals or special circumstances.

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Continued next page

## **Notice to Supervisor (Continued)**

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### **Performance Qualifications Sign-Off**

#### **NOTE**

It is highly recommended that all supervisors review the information covered in the “Administration” section of the Enlisted Qualifications Manual, COMDTINST 1414.8 (series) before any performance qualifications are signed-off or waived.

As PROFICIENCY in each performance qualification is demonstrated, the DATE and INITIALS columns of the students Record of Performance Qualifications should be signed-off by the student’s supervisor.

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### **For More Information**

For more detailed information on completion of the Record of Performance Qualifications, refer to (COMDTINST M1414.8, series).

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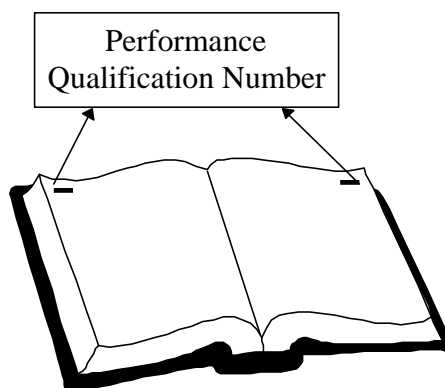
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	References.....	ii
	Notice to Student .....	iii
	Notice to Supervisor .....	v

## Performance Qualification Assignments

### ASSIGNMENTS

The assignments are numbered and arranged in the same manner as are the performance qualifications; Alpha-Numeric. The actual performance qualification number is listed in the upper-outer corner of each page which allows you to quickly scan the pages in order to find the specific performance qualification section. See the example below:



### APPENDIXES

Pamphlet Review Quiz .....	A-1
Pamphlet Review Quiz Answer Key .....	B-1
References.....	C-1
Student Feedback Form.....	D-1

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**Performance**

**REVIEW** discrepancy information from aircraft records and **DETERMINE** the appropriate action that should be taken.

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**References**

Perform the objectives listed below IAW one or more of the following references:

- Air Operations Manual, COMDTINST M3710.1 (series), Chapters 4 and 9
  - Aeronautical Engineering Maintenance Management Manual, COMDTINST M13020.1 (series), Chapters 1 and 4
  - ACMS
  - Applicable maintenance publications
  - Local station instructions (as applicable)
- 

**Performance Objective 1**


Given an aircraft discrepancy, **VERIFY** that the appropriate aircraft flight status is assigned.

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**Performance Objective 2**

Given an aircraft discrepancy, **REVIEW** the discrepancy with the originator (as required) to ensure that it is thoroughly understood.

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**Performance Objective 3**


Given an aircraft discrepancy, **DETERMINE** the rating responsible for correcting the discrepancy.

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**Performance Objective 4**

Given an aircraft discrepancy and the required technical information, **DETERMINE** the action to correct the discrepancy.

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### Objectives

To successfully complete this assignment, you must study the text and master the following objectives:

**STATE** the name of the manual used to assist Coast Guard personnel in procuring parts, tools, and other materials.

**STATE** the types of information the Federal Logistics (Fed Log) system provides.

**DETERMINE** the amount of identifying information needed to locate an item in the Fed Log system.

**STATE** the manual used to order ground support equipment for your assigned aircraft.

**DEFINE** an open market purchase.

**DEFINE** a micro-purchase.

**STATE** the micro-purchasing guidelines to follow when making an open market purchase.

**STATE** the monetary amount at which an open market purchase must be set aside for a small business.

**STATE** when to solicit at least 3 price quotes when making an open market purchase.

**STATE** the use of the Procurement Request Process Rapidly Form (PR).

**COMPLETE** a procurement request process rapidly form with the required information.

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Continued next page

## **6.A.02c      Procuring Parts, Tools, and other Materials (Continued)**

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### **References**

The information contained in this assignment can be found in the following references:

Aeronautical Engineering Maintenance Management Manual,  
COMDTINST M13020.1 (series)

General Services Administration (GSA) Supply Catalog

Federal Logistics (Fed Log) CD-ROM

Illustrated Parts Breakdown Manual,  
CGTO 1C-130-4

Illustrated Tool and Equipment Manual,  
A1-H60CA-GSE-400

Illustrated Tool and Equipment Manual,  
CGTO 32H-65A-2

Ground Support and Related Equipment Manual,  
CGTO 32A-25A-2

Simplified Acquisition Procedures Handbook,  
COMDTINST M4200.13 (series)

Supply Policy and Procedures Manual,  
COMDTINST M4400.19 (series)

Federal Acquisition Regulation (FAR) 19.102

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**Introduction**

This assignment is an introduction to the Federal Logistics (Fed Log) system, the General Services Administration (GSA) Catalog and the Ground Support Equipment (GSE) section of your aircraft technical manuals. In this assignment you will also go through the process of submitting a request for the open market purchase of parts, tools, and other materials.

As a first class petty officer and aircraft technician, you will use and rely upon these publications. Knowing how to use these publications is important for you to perform your duties. For procuring parts, tools, and other materials, refer to the Simplified Acquisition Procedures Handbook, COMDTINST M4200.13 (series).

Each Coast Guard unit must maintain an accountable, accurate open market purchase policy that conforms to the Federal Acquisition Regulations (FAR). Keeping these purchases accurate is important in account record keeping and property management.

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Continued next page

**In This  
Assignment**

This assignment contains the following:

Subject	Page
Types of Sources of Supply and Services .....	5
General Services Administration (GSA) Supply Catalog .....	6
Using the GSA Supply Catalog.....	7
Surf Requisition Form.....	8
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### **Introduction**

All government procurement actions, regardless of dollar value, shall use the following sources of supply.

---

### **Supplies**

The following sources are available for procurement of goods for the Coast Guard:

Agency Inventory

Excess From Others Agencies (e.g., Defense Reutilization and Marketing Office, DRMO)

Federal Prison Industries, Inc. (UNICOR)

Products available from the Committee for purchase from:

- People Who Are Blind or Severely Disabled
- National Industries for the Blind
- National Industries for the Severely Handicapped (NIB-NISH)
- Javits-Wagner-O'Day Act (JWOD)

Wholesale supply sources such as:

- GSA stock program
- Defense Logistics Agency (DLA)
- Department of Veterans Affairs (VA)
- Military inventory control points

Mandatory Federal Supply Schedules

Open-Market Commercial Suppliers (including educational and nonprofit institutions)

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### **Services**

The following sources are available for the procurement of services for the Coast Guard:

Committee for Purchase from People Who Are Blind or Severely Disabled (NIB-NISH)

Mandatory Federal Supply Schedules

Federal Prison Industries, Inc. (UNICOR)

Open Market Commercial Sources (including educational and nonprofit institutions)

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**Introduction**

The General Services Administration (GSA) is a government agency that buys commonly used supplies and services for all other government agencies. The GSA's office of Federal Supply Service (FSS) is the primary source of personal property, non-personal services, and numerous common-use materials and supplies. These materials and supplies are listed in the GSA Supply Catalog.

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**Description**

The GSA Supply Catalog lists over 24,000 products with descriptions and pictures. It also contains requisitioning instructions and product return instructions.

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**GSA Supply Catalog Sections**

The GSA Catalog is divided into the following sections:

Alphabetical Index

NSN Index

Specification Index

Introduction

Office/Shop Products

Tools

Industrial Products

Furniture

Each of the last four sections are divided into categories and subcategories that group products more specifically. A Divider Index at the beginning of each section lists the categories and subcategories in that section.

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**Mandatory Source**

The GSA Supply Catalog is a mandatory source of supply only if it meets your specific needs. If an item is not available from higher-priority sources and is listed in the GSA Supply Catalog, it must be ordered from this catalog.

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**Exception to Mandatory Source**

To determine if an exception is applicable, refer to the Simplified Acquisition Procedures Handbook, COMDTINST M4200.13 (series).

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**Introduction**

If a product is not located in the catalog, call GSA to inquire about the product. Prices are constantly changing with the times, so the actual prices listed in the catalog may be different from those shown.

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**Practice Exercise  
(GSA Supply  
Catalog)**

You need to order some glass cleaner for your shop so you get a copy of the GSA Catalog to research the required information.

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**Procedure for  
Using the GSA  
Catalog**

The following table details what you would do to find a particular product in the GSA Catalog:

STEP	ACTION
1	Turn to the Table of Contents and find the Alphabetical Index
2	Locate glass cleaner, look for page number
3	Turn to page and find picture, verbal description, sizes available, NSN, and prices
4	Enter all information on the Surf Requisition Log or unit equivalent
5	Submit paperwork to supply
6	Ensure copy of form is filed in your shop's budget file for future reference

---

## Introduction

The requisition form used by Coast Guard units to requisition parts, tools, and other materials, will either be form CG-4940, or your unit's equivalent. Once the part number, NSN, quantity, and unit cost are known, the next step is to place a requisition for the part.

## Definition of a CG-4940 Surf Requisition Form

The CG-4940 surf requisition form is a multi-purpose form and must be used by unit personnel to advise the storekeeper of the unit's material requirements.

## Example of a Surf Requisition Form

This is an example of a CG-4940 Surf Requisition Form.

[illegible]

## Guidelines for Completing the Form

Use the following guidelines for completing the Surf Requisition form:

Complete columns (3) through (8), and (15).

Ensure that supply, shipment status, and receipt of materiel ordered are recorded on the form to complete the transaction.

Use the requisition log as the undelivered order file so that the form can be used as a funding-approval document or for other purposes as locally determined.

**Introduction**

Items available from the Defense Logistics Agency (DLA) are listed in the Federal Logistics Computer Disk (CD) System (Fed Log) on CD-ROM.

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**Description of  
Fed Log  
Computer Disk  
(CD-ROM)  
System**

The Federal Logistics Computer Disk (CD) System is a multi-disk set, containing federal logistics information on one disk and Army-unique, Navy-unique, and Air Force-unique data on their own disks. The Fed Log system is currently used by all Coast Guard aviation units.

---

**Listed Items**

Fed Log provides logistics information, including the following:

CAGE codes (Commercial and Government Entity code)

National stock numbers

Reference number data

Item/colloquial name index

Part numbers

Suppliers

Interchangeability and substitutability information

Freight, and product characteristics

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**Guidelines for  
Accessing the  
Fed Log System**

How to use the computer system at your unit to access the Fed Log system is not covered in this assignment. You will need to have someone at your unit show you the procedure.

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**Introduction**

The Fed Log system is the same thing as the General Services Administration Catalog, except it is available on the CD ROM system.

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**Guidelines for Using the Fed Log System**

Once logged into the Fed Log System, follow the screen prompts and enter at least one piece of identifying information about the item you are looking for, such as:

Name/Nomenclature

Part number

National stock number

Regardless of which piece of information you enter, additional information will be displayed on the screen.

---

**Practice Exercise**

After using the last box of shop towels to clean up an oil spill, you need to order four more boxes.

---

**Procedure for Finding Products**

The following table details what you would do to find a particular product in the Fed Log system:

Step	Action
1	Get the part number off of the empty box
2	Enter the part number into the Fed Log System
3	Select the view for the information you require
4	Enter all information on the Surf Requisition Log or unit equivalent
5	Submit paperwork to supply
6	Ensure a copy of the form is filed in your shop's budget file for future reference

---

**Description**

Special tools and support equipment, are special tools, equipment, or test equipment designed for use on a specific aircraft. Each airframe has an illustrated parts breakdown of all special tools and ground support equipment associated with that aircraft.

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**Manuals and Stocking Lists**

The following reference manuals and stocking lists are used to research information used to order aircraft-special tools and support equipment (i.e. engine slings) that are only applicable to that airframe. The manuals and stocking lists are as follows:

<b>Aircraft Type</b>	<b>Type of Information/References</b>
HH-60J	Illustrated Parts Breakdown  Special Support Equipment A1-H60CA-GSE-400
HC-130	Illustrated Parts Breakdown  Aerospace Ground Equipment Section 1C-130H-4
HU-25	Illustrated Tool and Equipment Manual 32A-25A-2
HH-65A	Illustrated Tool and Equipment Manual 32H-65A-2
All Aircraft	Stocking List for all Aircraft Materiel  Listed according to unit's needs and what is in stock at that unit Aircraft Materiel Stocking List, CG 298

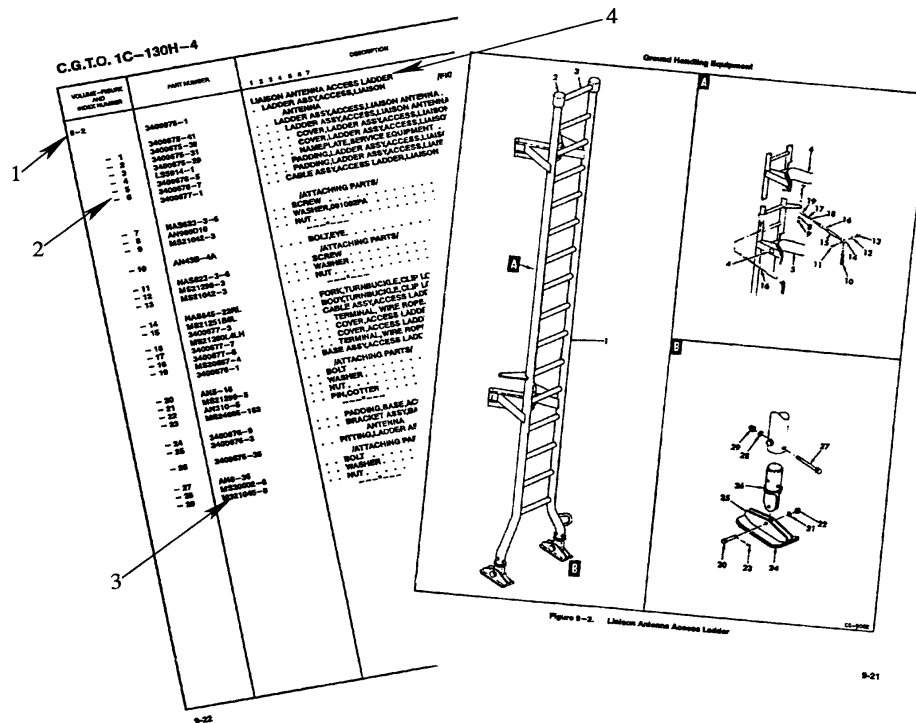
**Ordering**

After finding the part number for the item, enter it into the Fed Log system to access the required information to enter on the Surf Requisition Log. Complete the log and submit it to the unit storekeeper for processing. Ensure that you keep a copy for your shop files.

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### Illustration of a Support Equipment Manual

Below is an example of a support equipment manual showing a Liaison Antenna Access Ladder and it's parts breakdown as listed in the Aerospace Ground Equipment section of the Illustrated Parts Breakdown, 1C-130H-4.



### Description of Reference Numbers

Below are descriptions of references found in the Illustrated Parts Breakdown, 1C-130H-4.

Reference Number	Description
1	Figure number identifies the corresponding illustration.
2	Index numbers are assigned to individual parts that make up the assembly and correspond to the illustration numbers.
3	Part number, this is the part identification number assigned by the manufacturer.
4	Each part is described to make identification easier.

**Definition**

An open market purchase is a purchase from commercial sources when all government supply sources have been evaluated and are not available or cannot satisfy the government's needs.

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**Micro-Purchase Policy**

An open market purchase of supplies/services for \$2,500.00 or less is known as a micro-purchase. The procurement methods for making a micro-purchase are detailed in the Simplified Acquisition Procedures Handbook, COMDTINST M4200.13 (series). These methods are designed to do the following:

Reduce administrative work and expedite the purchases of readily available supplies/services.

Simplify the process once the procurement official determines that the item/service is not available from a mandatory source.

**NOTE**

Micro-purchasing does not waive mandatory supply sources or procedures.

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**Micro-Purchasing Guidelines**

The following guidelines should be followed when making a micro-purchase:

Purchases do not have to be reserved for small businesses

Purchases shall be rotated among qualified suppliers

Purchases may be made without competitive quotes

Ensure the price is fair and reasonable

Personal preference and brand-name identification shall not limit vendors

Federal Acquisition Regulation clauses are not required for micro-purchases

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**Small Business  
Set-Aside Policy**

All open market purchases between \$2,500.01 and \$100,000.00 are to be set aside for small business.

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**Small Business  
Requirements**

As stated in the Federal Acquisition Regulation (FAR) 19.102, the Small Business Administration establishes small business size standards on an industry-by-industry basis. Size standards are based on either a firm's average number of employees during pay periods for the preceding twelve months or its average annual gross receipts for the past fiscal years.

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**Procedure for  
Identifying a  
Small Business**

What is required of you, the requisitioner? Refer to the Simplified Acquisition Procedures Handbook M4200.13 (series) for information on open market purchases or refer to the steps in the following table:

Step	Action		
1	Ask the business or service you are dealing with if they are a small business or not.		
		<b>IF</b>	<b>THEN</b>
		they are,	do business with them.
		they are not,	find another source.

**NOTE**

When you turn in your Procurement Request Form, you will be informing the purchasing authority that you are dealing with a small business.

---

## Introduction

As a supervisor, you will be required to submit open market purchase requests for acquiring shop and aeronautical equipment, i.e. aircraft test equipment, cabinets, chairs, etc... Certain information is required from you, the requisitioner, to make the acquisition process run smoothly with minimum delays.

## Open Market Purchases and Procedures

Most open market purchases are considered Small Purchases. The steps listed below should be followed when submitting an open market purchase request.

Step	Action								
1	Locate sources and check suppliers for small business, labor surplus, and the buy - American program								
2	<div>Solicit price quotes (if required)</div> <table> <tr> <th>If the cost is...</th><th>Then...</th></tr> <tr> <td>\$2,500.00 or less</td><td>a one price quote is sufficient if price is considered to be fair and reasonable</td></tr> <tr> <td>more than \$2,500.01 up to \$100,000.00</td><td>you must solicit at least 3 competitive price quotes unless the vendor is a sole source</td></tr> <tr> <td>more than \$2,500.01 and the vendor is the sole source</td><td>document with a Sole Source Justification. Refer to COMDTINST M4200.13 (series)</td></tr> </table>	If the cost is...	Then...	\$2,500.00 or less	a one price quote is sufficient if price is considered to be fair and reasonable	more than \$2,500.01 up to \$100,000.00	you must solicit at least 3 competitive price quotes unless the vendor is a sole source	more than \$2,500.01 and the vendor is the sole source	document with a Sole Source Justification. Refer to COMDTINST M4200.13 (series)
If the cost is...	Then...								
\$2,500.00 or less	a one price quote is sufficient if price is considered to be fair and reasonable								
more than \$2,500.01 up to \$100,000.00	you must solicit at least 3 competitive price quotes unless the vendor is a sole source								
more than \$2,500.01 and the vendor is the sole source	document with a Sole Source Justification. Refer to COMDTINST M4200.13 (series)								
3	Evaluate solicited quotes to determine source of supply								
4	Complete a purchase request and submit to storekeeper								
5	Keep a copy of purchase request in shop files								

### NOTE

The purchase authority will be reviewing your procurement request and if the authority has any questions, it will be returned to you. A returned request will slow down the process.



## Introduction

After settling on a final quote for a product or service, you will have to fill out a *Department of Transportation (D.O.T.) Procurement Request Process Rapidly Form*, Form DOT F 4200.1.2CG (PR). This form is used to make an open market purchase and is submitted to your unit purchasing authority.

## Illustration of the Procurement Request Progress Rapidly

This is an example of a D.O.T. *Procurement Request Process Rapidly Form*, Form DOT F 4200.1.2CG (PR). The following two pages show how the form should be completed.

READ INSTRUCTIONS ON PAGE 2

PAGE 1 OF 2 PAGES

DEPARTMENT OF TRANSPORTATION										PROCUREMENT REQUEST NO.	
<div style="display: flex; justify-content: space-around;"> <div>PROCUREMENT PROCESS</div> <div>REQUEST RAPIDLY</div> </div>										DATE RECEIVED	
1. NAME, PHONE NUMBER, AND ROUTING SYMBOL OF PERSON TO CONTACT										2. TYPE OF REQUEST (Check one)	
3. ORIGINATING OFFICE DATA										A. <input type="checkbox"/> NEW REQUEST	
4. ADDITIONAL INFORMATION (Suggested supply sources, security data, etc.)										B. <input type="checkbox"/> CHANGE TO PENDING PR NO. _____	
										C. <input type="checkbox"/> MODIFICATION TO CONTRACT OR ORDER NO. _____	
5. APPROVALS										6. CONSIGNEE AND DESTINATION	
APPROVING OFFICIALS				ROUTING SYMBOL	DATE	INTERNAL		ROUTING			
(A)				(B)	(C)	(D)		(E)			
(1) AUTHORIZED REQUISITIONER											
(2) ACCOUNTING CERTIFICATION OFFICER											
(3)											
(4)											
7. DATE(S) REQUIRED											
8. GOVERNMENT FURNISHED PROPERTY										<input type="checkbox"/> YES <input type="checkbox"/> NO (If "YES" see par. 8 of instructions on page 2)	
9. DESCRIPTION OF ITEMS OR SERVICES											
ITEM NO. (A)	ITEM OR SERVICE (Include Specifications and Special Instructions) (B)					QUANTITY (C)	UNIT (D)	ESTIMATED COST			
								UNIT (E)	AMOUNT (F)		
10. ACCOUNTING DATA (Subhead Administrator complete shaded blocks. Accounting Branch complete remaining blocks.)											
CHECK APPLICABLE QUARTER <input type="checkbox"/> 1ST <input type="checkbox"/> 2ND <input type="checkbox"/> 3RD <input type="checkbox"/> 4TH											
TOTAL											
AGENCY	APPN CODE	LIM CODE	FUND CODE	PROGRAM ELEMENT	COST CENTER	OBJECT CLASS	DOCUMENT NO.			SUFFIX	AMOUNT
							TYPE	FY	P.R. NO.		
2							2	1			
2							2	1			

FORM DOT F 4200.1.2CG (Rev. 10-90)

Continued next page

**Description/  
Function of  
Sections**

The reference table below gives an explanation of each section of the form that is required to be filled out. The rest of the form will be filled out by the supply department. The Procurement Request Process Rapidly Form (PR) is on the following page:

<b>Block No.</b>	<b>Description</b>	<b>Function</b>	<b>Remarks</b>
1	Name & Phone Number	Your name, title and extension	Typed or Printed
2	Type of Request A. New Request B. Change to ... C. Modification to ...	Check whether PR will be a new one, continuation, or modifying existing order	Typed or Printed
3	Originating Office Data	Your shop/office, work area	Typed or Printed
4	Additional Information	Name, address, phone number and fax number of the company or service you are doing business with	Typed or Printed
5	Approvals A. C. B. D. Routing	Name and Title of Approving Official(s)	Typed or Printed
6	Consignee & Destination	Where the merchandise is sent to, or services performed at	Typed or Printed
7	Date Required/PR Priority	An agreed upon delivery date or date item needed by, between the supplier and the requisitioner	PR/Priority
8	Self-explanatory	Self-explanatory	Self-explanatory
9	Description of Items or Service	Enter the description, quantity, unit and estimated cost	Include the cost of shipping in the amount column
10	Accounting Data	Indicates the quarter of the fiscal year the funds are coming out of and the total amount of the order	1 <sup>st</sup> , 2 <sup>nd</sup> , etc...

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Continued next page

Description/  
Function of  
Sections  
(Continued)

Blocks located below block # 10, is information that must be completed by the store keeper at your unit. It is accounting data that is for unit level information concerning supply.

Example of  
Completed PR  
Form

A typical Procurement Request Process Rapidly Form (PR) is completed as shown below.

READ INSTRUCTIONS ON PAGE 2 PAGE 1 OF 1 PAGES

DEPARTMENT OF TRANSPORTATION						PROCUREMENT REQUEST NO.						
<div style="display: flex; justify-content: space-around; font-size: 2em; font-weight: bold;"> <span>P</span> <span>R</span> </div> <div style="display: flex; justify-content: space-around; font-weight: bold;"> <span>ROCCESS</span> <span>REQUEST RAPIDLY</span> </div>						DATE RECEIVED						
1. NAME, PHONE NUMBER, AND ROUTING SYMBOL OF PERSON TO CONTACT AMTC Zahand ext. 6418						2. TYPE OF REQUEST (Check one) A. <input checked="" type="checkbox"/> NEW REQUEST						
3. ORIGINATING OFFICE DATA AMT Shop Building 8						B. <input type="checkbox"/> CHANGE TO PENDING PR NO.						
4. ADDITIONAL INFORMATION (Suggested supply sources, security data, etc.) Midatlantic Electrical Supply Phone# (410)641-7159 4331 S. Greenmont Ave. Baltimore, MD 21237 Fax# (410)641-7158						C. <input type="checkbox"/> MODIFICATION TO CONTRACT OR ORDER NO.						
5. APPROVALS						6. CONSIGNEE AND DESTINATION Commanding Officer USCG AVTECHTRACEN Bldg 8 Elizabeth City, NC 27909						
APPROVING OFFICIALS		ROUTING SYMBOL	DATE	INTERNAL ROUTING								
(A)	(B)	(C)	INITIALS (D)	ROUTING SYMBOL								
(1) AUTHORIZED REQUISITIONER AMTCS King												
(2) ACCOUNTING CERTIFICATION OFFICER CWO Mock												
(3)						7. DATE(S) REQUIRED 30 December 2001 PR Priority:						
(4)						8. GOVERNMENT FURNISHED PROPERTY <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO (If "YES" see par. 8 of Instructions on page 2.)						
9. DESCRIPTION OF ITEMS OR SERVICES												
ITEM NO. (A)	ITEM OR SERVICE (Include Specifications and Special Instructions) (B)					QUANTITY (C)	UNIT (D)	ESTIMATED COST				
								UNIT (E)	AMOUNT (F)			
01	Raychem Compressed Air/ Nitrogen Heater Nitrogen Heater Model # HT900B					01	EA	\$2,300	\$2300.00			
	Shipping Charge					01	EA	\$25.00	\$25.00			
10. ACCOUNTING DATA (Subhead Administrator complete shaded blocks. Accounting Branch complete remaining blocks.)												
CHECK APPLICABLE QUARTER <input type="checkbox"/> 1ST <input type="checkbox"/> 2ND <input checked="" type="checkbox"/> 3RD <input type="checkbox"/> 4TH						TOTAL		\$2325.00				
A G E N C Y	APPN CODE	LIM CODE	FUND CODE	PROGRAM ELEMENT	COST CENTER	OBJECT CLASS	DOCUMENT NO.				SUFFIX	AMOUNT
							TYPE	FY	P.R. NO.			
2							2	1				
2							2	1				

FORM DOT F 4200.1-2CG (Rev. 10-90)

**Introduction**

You will complete a Procurement Request Form with the information provided in the practice scenario below.

---

**Directions**

Read the scenario below and complete the PR on the next page, or a blank form provided at your unit with the required information.

---

**Scenario**

As the Aviation Maintenance Supply Petty Officer for your unit, you are taking an inventory of electrical equipment and determine that you need to order three multimeters and two megohmmeters to bring your inventory back up to complement.

You have just entered the fourth quarter of the fiscal year.

You found a company that supplies what you are looking for, and is classified as a small business, (Network Electronics, 5415 Mariner St. Largo, Florida, 33541, Phone # (813) 555-1111, Fax # (813) 555-1112.

Shipping charge, \$24.00.

Visa credit card is accepted.

Shipping time is 14 days.

Item #1: Megohmmeter, battery powered, digital, model # AMB-4D, stock # 50F4911, price \$279.85 each.

Item #2: Multimeter high performance, model #79, stock #50F6944, price \$185.00 each.

You are to use your unit's address, work area and extension to complete the Procurement Request Form.

---

Continued next page

**Procurement  
Request Process  
Rapidly Form**

Complete the form below using the information provided on page 20. If you have questions filling out the form, review the feedback on the next page.

READ INSTRUCTIONS ON PAGE 2

PAGE 1 OF PAGES

DEPARTMENT OF TRANSPORTATION <div style="display: flex; justify-content: space-around; font-size: 2em; font-weight: bold;"> <span>P</span><span>R</span> </div> <div style="display: flex; justify-content: space-around; font-weight: bold;"> <span>ROCUREMENT ROCESS</span> <span>REQUEST RAPIDLY</span> </div>						PROCUREMENT REQUEST NO.  DATE RECEIVED					
1. NAME, PHONE NUMBER, AND ROUTING SYMBOL OF PERSON TO CONTACT						2. TYPE OF REQUEST (Check one) A. <input type="checkbox"/> NEW REQUEST B. <input type="checkbox"/> CHANGE TO PENDING PR NO. _____ C. <input type="checkbox"/> MODIFICATION TO CONTRACT OR ORDER NO. _____					
3. ORIGINATING OFFICE DATA											
4. ADDITIONAL INFORMATION (Suggested supply sources, security data, etc.)											
5. APPROVALS						6. CONSIGNEE AND DESTINATION      7. DATE(S) REQUIRED   8. GOVERNMENT FURNISHED PROPERTY <input type="checkbox"/> YES <input type="checkbox"/> NO (If "YES" see par. 8 of Instructions on page 2.)					
APPROVING OFFICIALS (A)		ROUTING SYMBOL (B)	DATE (C)	INTERNAL ROUTING INITIALS (D)      ROUTING SYMBOL							
(1) AUTHORIZED REQUISITIONER											
(2) ACCOUNTING CERTIFICATION OFFICER											
(3)											
(4)											
9. DESCRIPTION OF ITEMS OR SERVICES											
ITEM NO. (A)	ITEM OR SERVICE (Include Specifications and Special Instructions) (B)				QUANTITY (C)	UNIT (D)	ESTIMATED COST UNIT (E)      AMOUNT (F)				
10. ACCOUNTING DATA (Subhead Administrator complete shaded blocks. Accounting Branch complete remaining blocks.)											
CHECK APPLICABLE QUARTER <input type="checkbox"/> 1ST <input type="checkbox"/> 2ND <input type="checkbox"/> 3RD <input type="checkbox"/> 4TH						TOTAL					
AGENCY	DIST	APPN CODE	LIM CODE	FUND CODE	PROGRAM ELEMENT	COST CENTER	OBJECT CLASS	DOCUMENT NO. TYPE    FY      P.R. NO.		SUFFIX	AMOUNT
2								2	1		
2								2	1		

FORM DOT F 4200.1.2CG (Rev. 10-90)



## Feedback

Your Purchase Request form should be completed as shown below. If you had trouble completing this form, review the applicable section of this reading assignment and correct any errors found.

READ INSTRUCTIONS ON PAGE 2 PAGE 1 OF 1 PAGES

DEPARTMENT OF TRANSPORTATION <div style="display: flex; justify-content: space-around; font-size: 2em; font-weight: bold;"> <span>P</span> <span>R</span> </div> <div style="display: flex; justify-content: space-around; font-weight: bold;"> <span>ROCUREMENT</span> <span>REQUEST</span> </div> <div style="display: flex; justify-content: space-around; font-weight: bold;"> <span>ROCESS</span> <span>RAPIDLY</span> </div>						PROCUREMENT REQUEST NO.					
						DATE RECEIVED					
1. NAME, PHONE NUMBER, AND ROUTING SYMBOL OF PERSON TO CONTACT Trainees name and extension						2. TYPE OF REQUEST (Check one)					
3. ORIGINATING OFFICE DATA Trainees shop/work area/ext.						A. <input checked="" type="checkbox"/> NEW REQUEST					
4. ADDITIONAL INFORMATION (Suggested supply sources, security data, etc.) Network Electronics Phone# (813)555-1111 5415 Mariner St. Largo, FL 33541 Fax # (813)555-1112						B. <input type="checkbox"/> CHANGE TO PENDING PR NO. _____					
						C. <input type="checkbox"/> MODIFICATION TO CONTRACT OR ORDER NO. _____					
5. APPROVALS						6. CONSIGNEE AND DESTINATION Commanding Officer USCG Airstation  Trainees unit address					
APPROVING OFFICIALS		ROUTING SYMBOL	DATE	INTERNAL ROUTING							
(A)		(B)	(C)	(D)							
(1) AUTHORIZED REQUISITIONER											
Trainee's Approving Off											
(2) ACCOUNTING CERTIFICATION OFFICER						7. DATE(S) REQUIRED Calendar Date: June 1, 1998 PR Priority					
(3)						8. GOVERNMENT FURNISHED PROPERTY <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO (If "YES" see par. 8 of Instructions on page 2)					
(4)											
9. DESCRIPTION OF ITEMS OR SERVICES											
ITEM NO. (A)	ITEM OR SERVICE (Include Specifications and Special Instructions) (B)					QUANTITY (C)	UNIT (D)	ESTIMATED COST			
								UNIT (E)	AMOUNT (F)		
01	Megohmmeter, Battery Powered Digital Model # AMB-4D, Stock # 50F4911					02	EA	279.85	\$559.70		
02	Multimeter, High Performance Model # 79, Stock # 50F6944					03	EA	185.00	\$555.00		
	Shipping					01	EA	\$24.00	\$24.00		
10. ACCOUNTING DATA (Subhead Administrator complete shaded blocks. Accounting Branch complete remaining blocks.)											
CHECK APPLICABLE QUARTER <input type="checkbox"/> 1ST <input type="checkbox"/> 2ND <input type="checkbox"/> 3RD <input checked="" type="checkbox"/> 4TH								TOTAL	\$1138.70		
AGENCY	APPN CODE	LIM CODE	FUND CODE	PROGRAM ELEMENT	COST CENTER	OBJECT CLASS	DOCUMENT NO.			SUFFIX	AMOUNT
							TYPE	FY	P.R. NO.		
2							2	1			
2							2	1			

FORM DOT F 4200.1.2CG (Rev. 10-90)

**Directions**

In this practice exercise you will be using either the GSA Catalog or the GSA CD-ROM on the Fed Log System. Read each scenario below carefully and research the required information. After you have completed the practice exercise, compare your information with the feedback on the next page.

---

**Materials  
Required**

The following materials are required to complete scenario's #1 and #2.

GSA Catalog

GSA CD-ROM for the Fed Log System

---

**Scenario # 1**

You are assigned to the AMT shop, and your Chief assigns you the task of ordering two new non-sparking 5.5" to 6.6" long, three - quarter inch jaw capacity adjustable wrenches for the oxygen carts. Using either the GSA catalog or the Fed Log system, research the wrenches and fill out the Surf Requisition (CG 4940) or local equivalent.

---

**Scenario # 2**

You are assigned to the Quality Assurance Office. Your Chief informs you that the office is running low on medium size paper clips and assigns you the task of ordering ten boxes. Using either the GSA catalog or the Fed Log system, research the medium size paper clips and fill out the Surf Requisition Log (CG 4940) or local equivalent.

---

**Feedback**

Compare your information with the feedback below. The prices may be different due to the time of publication of this text, and price adjustments. If you had trouble finding the information, review the appropriate section of this lesson or have someone at your unit show you how to access the information.

---

**Scenario # 1**

Adjustable Wrench, non -sparking  
Stock Number (5120-00-278-0340)  
Price (\$22.97)  
Unit of Issue (EA)  
Source of Supply (GSA)

---

**Scenario # 2**

Paper Clip, medium  
Stock number (7510-00-161-4291)  
Price (\$0.57)  
Unit of Issue (BX)  
Source of Supply (GSA)

---

**Introduction**

The following practice scenarios are universal in that they can be used on any of the four main airframes currently in the Coast Guard inventory. You will be required only to complete the scenario which pertains to the aircraft that you are assigned at your unit.

---

**Materials  
Required**

You will need the aircraft Ground Support Equipment Manual for unit assigned aircraft to complete the scenarios below:

---

**Directions**

Research the information you would need to provide to your unit's supply department to order the part (part number, stock number, unit cost, source of supply, unit of issue and quantity).

---

**Scenario # 1**

You are assigned to Line Maintenance at your unit. Your Chief just surveyed an aircraft tow bar and assigns you the task of ordering a replacement. Research the required information in the applicable GSE manual and fill out a procurement request or unit equivalent.

---

**Scenario # 2**

You are assigned to the engine shop. Your Chief assigns you the task of ordering a new engine sling. Research the required information in the applicable GSE manual and fill out a procurement request or unit equivalent.

---

Continued next page

**Feedback  
Scenario #1**

Compare your information to the feedback below. If you had any trouble finding the information, review the Procuring Ground Support Equipment section in this lesson or have someone show you how to access the information.

<b>Towbar</b>	<b>HC-130</b>	<b>HU-25</b>
Part Number	403980-1	TMY2-09.105
Stock Number	1730-00-554-5439	Supplied by ARSC
Unit Cost	\$3,630.00	Supplied by ARSC
Source of Supply	N32	ARSC
Unit of Issue	EA	EA
Quantity	01	01

<b>Towbar</b>	<b>HH-60</b>	<b>HH-65</b>
Part Number	1479AS400-1	703A91-0415-00
Stock Number	1730-01-154-1784	Supplied by ARSC
Unit Cost	\$7,200.00	Supplied by ARSC
Source of Supply	N32	ARSC
Unit of Issue	EA	EA
Quantity	01	01

---

Continued next page

## **Procuring Ground Support Equipment, Feedback (Continued) 6.A.02c**

### **Feedback Scenario # 2 (Continued)**

Compare your information to the feedback below. If you had any trouble finding the information, review the Procuring Ground Support Equipment section in this lesson or have someone show you how to access the information.

<b>Engine Sling</b>	<b>HC-130</b>	<b>HU-25</b>
Part Number	404055-1	TMY20-71.102G01
Stock Number	1730-00-670-1556	Supplied by ARSC
Unit Cost	\$7,750.00	Supplied by ARSC
Source of Supply	N32	ARSC
Unit of Issue	EA	EA
Quantity	01	01

<b>Engine Sling</b>	<b>HH-60</b>	<b>HH-65</b>
Part Number	70700-77408-047	LTCT-5454-01
Stock Number	1730-01-274-3556	Supplied by ARSC
Unit Cost	\$286.00	Supplied by ARSC
Source of Supply	N32	ARSC
Unit of Issue	EA	EA
Quantity	01	01



**Questions**

Answer the following questions on procuring parts, tools and other materials

1. What is the name of the manual used to assist Coast Guard personnel in procuring parts tools and materials?

\_\_\_\_\_

\_\_\_\_\_

2. What types of information does the Fed Log system provide?

1) \_\_\_\_\_ 2) \_\_\_\_\_

3) \_\_\_\_\_ 4) \_\_\_\_\_

5) \_\_\_\_\_ 6) \_\_\_\_\_

7) \_\_\_\_\_ 8) \_\_\_\_\_

9) \_\_\_\_\_

3. When logged on the Fed Log system, follow the

\_\_\_\_\_ and enter at least

\_\_\_\_\_ about the item.

4. What manuals are used to research the information required to order ground support equipment, for your specific aircraft? (Only one answer required)

1) HH-60J \_\_\_\_\_

2) HC-130 \_\_\_\_\_

3) HU-25 \_\_\_\_\_

4) HH-65A \_\_\_\_\_

---

Continued next page



**Questions  
(Continued)**

5. What is an open market purchase?

---

---

---

6. An open market purchase of supplies/services for \$2,500.00 or less is known as a \_\_\_\_\_.

7. State the guidelines to follow when making a micro-purchase.

1 \_\_\_\_\_

2 \_\_\_\_\_

3 \_\_\_\_\_

4 \_\_\_\_\_

5 \_\_\_\_\_

6 \_\_\_\_\_

8. All open market purchases between \$\_\_\_\_\_ and \$\_\_\_\_\_ are set aside for small businesses.

---

Continued next page

**Questions  
(Continued)**

9. When making an open market purchase, you should solicit at least  
3 price quotes if the purchase price is greater than

\$\_\_\_\_\_.

10. You will have to fill out a Procurement Request Process Rapidly  
Form (PR) after settling on a \_\_\_\_\_.

11. The Procurement Request Process Rapidly Form (PR) is used to  
make an \_\_\_\_\_.

---

**Feedback**

Compare your answers to the feedback provided below. If you had trouble with this self-quiz, please review the appropriate section of this assignment.

Question	Answer	Reference
1	The Simplified Acquisition Procedures Handbook, COMDTINST M4200.13 (series)	3
2.	1) CAGE codes 2) National stock numbers 3) Reference number data 4) Item/colloquial name index 5) part numbers 6) suppliers 7) interchangeability and substitutability information 8) freight 9) product characteristics	9
3.	1) screen prompts 2) one piece of identifying information	10
4.	A1-H60CA-GSE-400 1C-130H-4 32A-25A-2 32H-65A-2	11
5.	A purchase from commercial sources when all government supply sources have been evaluated and are not available or cannot satisfy the government's needs.	13
6.	micro-purchase	13

---

Continued next page

## Procuring Parts, Tools, and other Materials

### Self-Quiz, Feedback (Continued)

6.A.02c

#### Self-Quiz Feedback (Continued)

Compare your answers to the feedback provided below.

Question	Answer	Reference
7.	1) Purchases do not have to be reserved for small businesses  2) Purchases shall be rotated among qualified suppliers  3) Purchases may be made without competitive quotes  4) The price is fair and reasonable  5) Personal preference and brand-name identification shall not limit vendors  6) Federal Acquisition Regulation clauses are not required for micro-purchases	13
8.	\$2,500.01 and \$100,000.00	15
9.	\$2,500.01	15
10.	final quote for a product or service	17
11.	open market purchase	17



**Performance**

PROCURE parts, tools and other materials.

---

**References**

Perform objectives listed below IAW one or more of the following references:

COMDTINST M13020.1 (series)

COMDTINST M4400.19 (series)

COMDTINST M4200.13 (series)

CGTO 1C-130-4

A1-H60CA-GSE-400

CGTO 32H-65A-2

CGTO 32A-25A-2

Federal Logistics (Fed Log) CD-ROM

General Services Administration (GSA) Supply Catalog

Local Instructions (as applicable)

---

**Performance  
Objective 1**

Given access to the Fed Log System and at least one piece of identifying information for an item, **OBTAIN** all the required information to order the item.

\_\_\_\_\_ 

---

**Performance  
Objective 2**

Given access to a GSA Catalog and the name of an item, **OBTAIN** all the required information to order the item.

\_\_\_\_\_ 


---

Continued next page

**Performance  
Objective 3**

Given the name of an aircraft special tool, the applicable Ground Support Equipment Manual, a CG 298, and access to the Fed Log System, **OBTAIN** all the required information to order the special tool.

---

**Performance  
Objective 4**

Given all the information required to order parts, tools, and other materials, **COMPLETE** the appropriate form, either a surf requisition form/local equivalent or a procurement request process rapidly form.

---



**Performance**

PREPARE shop and aircrew training schedules.

---

**References**

Perform the objectives listed below IAW one or more of the following references:

- Air Operations Manual, COMDTINST M3710.1 (series), Chapters 1, 8, 9, and Appendix A
  - Aeronautical Engineering Maintenance Management Manual, COMDTINST M13020.1 (series), Chapter 6
  - Aviation Maintenance Management Information System (AMMIS)
  - Local station instructions (as applicable)
- 

**Performance Objective 1**

**DETERMINE** shop training required.

---

**Performance Objective 2**

**DETERMINE** the personnel available for conducting shop training.

---

**Performance Objective 3**

**PREPARE** a shop training schedule.

---

**Performance Objective 4**






**COORDINATE** aircrew training with the Training Petty Officer to meet station requirements.

---







<b>Performance</b>	DIRECT personnel in the safe handling and disposal of hazardous material. <hr/>
<b>References</b>	Perform the objectives listed below IAW one or more of the following references: <ul style="list-style-type: none"><li>• Aeronautical Engineering Maintenance Management Manual, COMDTINST M13020.1 (series), Chapters 12 &amp; 14</li><li>• Material Safety Data Sheets (MSDS)</li><li>• Local station instructions (as applicable)</li></ul> <hr/>
<b>Performance Objective 1</b>	<b>REVIEW</b> MSDS's and local station instructions concerning handling and disposal of hazardous materials. <div><hr/></div> <hr/>
<b>Performance Objective 2</b>	<b>IDENTIFY</b> hazardous materials in your work area(s). <div><hr/></div> <hr/>
<b>Performance Objective 3</b>	<b>STATE</b> hazardous material handling and disposal procedures to personnel at your unit. <div><hr/></div> <hr/>
<b>Performance Objective 4</b>	<b>ASSIGN</b> personnel to dispose of hazardous materials. <div><hr/></div> <hr/>
<b>Performance Objective 5</b>	<b>VERIFY</b> that the hazardous material has been disposed of properly. <div><hr/></div> <hr/>



**Objectives**

To successfully complete this assignment, you must study the text and master the following objectives:

- **STATE** the manual used for additional information on the Aviation Computerized Maintenance System (ACMS).
  - **STATE** the 3 common types of maintenance reports.
  - **STATE** the disposition of Significant Component History Report's (SCHR's) for uninstalled serial numbered items.
  - **STATE** the minimum printing requirements for the Maintenance Due List (MDL).
- 

**References**

The information contained in this assignment can be found in the following references:

- Aeronautical Engineering Maintenance Management Manual, COMDTINST M13020.1 (series)
  - ACMS User's Guide, CGTO PG-85-00-10
-

**In This  
Assignment**

This assignment contains the following:

Subject	Page
ACMS Component Reports .....	3
ACMS Configuration Report.....	4
ACMS Significant Component History Report.....	6
ACMS Maintenance Due List Report .....	8
ACMS Report Data Self-Quiz.....	10
ACMS Report Data Self-Quiz, Feedback.....	12
Syllabus .....	13

---

**Introduction**

All Coast Guard aircraft have specific components or equipment that are tracked or monitored by flight hours, landings or cycles including the actual airframe itself. This information is compiled and printed in several different computer report formats. The reports can be used to form trend analysis and to identify problem areas.

---

**Reports**

Common reports that are frequently generated by the ACMS user are the reports that you as a technician at a unit will most likely come in contact with from day to day. For additional information about types of reports and information contained in the ACMS, refer to CGTO PG-85-00-10. Listed below are some of the common reports generated:

- Configuration Report
  - Maintenance Due List
  - Significant Component History Report (SCHR)
-

**Configuration Report**

The Configuration Report presents a detailed itemized listing of an aircraft or selected assembly that is tracked by serial number. The configuration report primarily lists all sub-components of a major assembly tracked by serial number. Informational details of the report include:

- Part Name
- Part Pos (Part Position)
- CEI Number (Component End Item; used by ACMS contractor)
- Serial Number
- Part Number
- TSN (Time Since New)
- TSO (Time Since Overhaul)

**NOTE**

The absence of a serial number entry against a particular component indicates that the component is not installed in the database and required maintenance is not being scheduled for it.

---

Continued next page





**Significant  
Component  
History Report  
(SCHR)  
Description**

This computer-generated report provides a record of significant maintenance actions on serial number tracked items. SCHR's are required to be maintained on all components listed on the Aircraft Configuration Report.

---

**SCHR Entries**

Entries to the SCHR that are associated with the processing of a completed Maintenance Procedure Card (MPC) are automatic and include:

- TSN ( Time Since New)
- TSO (Time Since Overhaul)
- CSN (Cycles Since New)

Information for the following maintenance actions:

- Installations
  - Removals
  - Overhauls
  - Special Inspections (i.e. overtorque, overspeed, hard landing, etc.)
  - TCTO accomplishment
- 

**Other  
Requirements**

Other required entries must be separately entered into the database using appropriate ACMS forms [refer CGTO PG-85-00-10]. All uninstalled serial number tracked components must be accompanied by its SCHR. Major assemblies, classified as Type I (such as engines, rotor heads etc.) which have other serial number tracked components attached must be accompanied by a current Configuration Report as well as all the applicable SCHR's.

**CAUTION**

Do not install components tracked by serial number without a SCHR.

---

Continued next page

## SCHR Example

The report shown below is an example of a typical ACMS Significant Component History Report; this one is for the HU-25 general information summary:

SIGNIFICANT COMPONENT HISTORY REPORT  
(REPLACES AFTO FORM 95)

PAGE: 3  
DATE: 07/13/98

\*\*\*\*\*  
GENERAL INFORMATION SUMMARY  
\*\*\*\*\*

SERIAL NUMBER: 2110  
ACCEPTANCE DATE: 04/30/82  
MANUFACTURER: FALCON JET CORP

COMPONENT NAME: HU25 AIRFRAME  
PART NUMBER: HU-25A  
CEI NUMBER: 25-5300-001

ACTION DATE	ACTION APPLIED TO COMPONENT	TSN	TSO	OPERATING ACTIVITY
01/04/95	QUANTECH 9500 FIBER OPTIC CABLE	2889	2889	AR & SC
03/06/95	COMPLIED WITH TCCTO H25925002; MODIFICATION OF AGILEITE CAMERA	2914	2914	AR & SC
05/02/95	COMPLIED WITH TCCTO H25934060; INSTALLATION OF TRAFFIC COLLISION AVOIDANCE SYSTEM (TCAS). PROTOTYPED ON 2110	2931	2931	AR & SC
08/10/95	COMPLIED WITH TCCTO 925080; PILOT, COPILOT, AND CREW RESTRAINT HARNESES INSPECTION. REFER TO CG MESSAGE PR 212349Z DEC94.NONE	2948	2950	AR & SC
09/01/95	COMPLIED WITH TCCTO H25 923120; MODIFY REAR COMPARTMENT SERVICE JACK	2964	3251	OPERATIONS CENTER
02/29/96	H25A923080 REPLACE ARC 160 WITH DES ARC-513	3038	3038	AR & SC
02/29/96	COMPLIED WITH TCCTO H25930021; PITOT STATIC PROBE HEAT AND MONITOR BOX	3038	3038	AR & SC
05/09/96	COMPLIED WITH TCCTO H25-930020; PITOT-STATIC PROBE HEAT AND MONITOR BOX MODIFICATION	3074	3074	AR & SC
06/18/96	COMPLIED WITH TCCTO H25-923111; INSTALLATION OF ALTERNATE ACS/HOT MIC SWITCHPROTOTYPED 10/27/94 BY ARSC.	3090	3090	AR & SC
01/16/97	COMPLIED WITH TCCTO H25 924050; GENERATOR PYLON FEED THROUGH CONNECTOR INSPECTION	3174	3174	AR & SC
05/05/97	COMPLIED WITH TCCTO H25-923100; ANDVT SIDETONE AMPLIFIER INSTALLATION	3234	3234	AR & SC
05/05/97	COMPLIED WITH TCCTO H25925100; RELOCATE O2 BOTTLE / CABIN FIRE EXTINGUISHER	3234	3234	AR & SC
06/19/97	COMPLIED WITH TCCTO H25954080; ENGINE COWLING HINGE LOCK MODIFICATION	3247	3247	AR & SC
09/15/97	HU25 953060 INSPECT WING TO FUSELAGE FILLET COMPLIED WITH	3282	3282	AR & SC
09/18/97	COMPLIED WITH CGCTO H25-926020.0 FIRE EXTINGUISHING CHECK VALVE INSPECTION. REPLACED VALVE	3284	3284	AR & SC
12/11/97	COMPLIED WITH TCCTO 93007.0, INSPECTION OF STALL VANE HEAT RELAY	3325	3325	AR & SC
01/05/98	HU25 TCCTO 932020	3331	3331	AR & SC
04/01/98	INSPECTED MAIN WHEEL BEARINGS IAW TCCTO 932030.0 FOUND 3 FAG BEARINGS	3382	3382	AR & SC
04/20/98	H25-924090.0 COMPLIED WITH THIS DATE	3382	3382	AR & SC
05/19/98	H-25 927020.0 INSPECTION OF AUTO SLAT TRESHOLD CONTROL BOX FOR EVIDENCE OF OVERHEATING COMPLIED WITH THIS DATE. #1 TRESHOLD DETECTOR BURNED UP	3385	3385	AR & SC
	H25-923160, MODIFICATION OF AN/ARC-513 VHF-FM DES CIRCUIT CARD COMPLIED WITH THIS DATE.			

"END-OF-REPORT"

191 rows

**Maintenance Due List Report (MDL)**

This computer generated report shows the projected scheduled maintenance of calendar and hourly tasks for a 2-month operating period. The report is printed monthly at a minimum, for each aircraft assigned to the unit.

---

**MDL Information**

The information presented on the MDL is basic and self-explanatory using common ACMS abbreviations.

---

**MDL Uses**

The MDL is used in preparing aircraft for deployments, scheduling work loads, planning for major inspections, establishing aircraft lineups (what aircraft to fly first), and determining aircraft availability.

---

Continued next page

## ACMS Maintenance Due List (Continued)

6.A.05c

## Maintenance Due List (MDL) Example

The report shown below is an example of an MDL; this one is an hourly MDL for the HH-65:

CG / HH-65A AIRCRAFT ACMS/AVIONICS MAINTENANCE DUE LIST										PAGE: 1
HOURS										DATE: 07/13/98
(INFORMATION BLOCK)										
*****										
ASSEMBLY SERIAL NO : 6544										
OPERATING ACTIVITY : SAVANNAH										
FLIGHT HOURS : 6154										
PROJECT THRU : 6254										
*****										
ACTION										
CMSCODE	MPCNO	CODE	DESCRIPTION	SERIAL NUMBER	POS TYPE	MHR	REQ'D HRS	EST EVERY MOS	DO NOT AC DUE DATE	
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
120012	12001.1	CHECK	CHIP DETECTOR RESISTANCE	6544	AE	1.0	150		6185	6200 6185
122013	12003.1	SERVICE	CHANGE TAIL GEARBOX OIL	6544	AD	2.0	150		6185	6200 6185
214002	21400.2	INSP/CHK	ECS COMPRESSOR DRIVE BELT	6544	AM	2.0	150		6185	6200 6185
632018	63015.3	INSP/CHK	MAIN GEAR BOX OIL FILTER	6544	AD	2.0	150		6185	6200 6185
720001	72001.0	INSPECT	ENGINE PERIODIC	W85B021	01 AD	6.0	150		6185	6200 6185
725052	72015.1	INSPECT	IBPT BLADE DISPLACEMENT	SC46975	01 AD	3.0	150		6185	6200 6185
725085	72012.1	TEST	NO. 2 & 3 BRG OIL JETS	W84G020	01 AD	2.5	150		6185	6200 6185
761019	76001.0	CHECK	ENGINE TOPPING	W85B021	01 AD	3.0	150		6185	6200 6185
761020	76001.5	CHECK	ENGINE POWER ASSURANCE	W85B021	01 AD	3.0	150		6185	6200 6185
771013	77007.0	TEST	#1 TORQUE TRANSDUCER(CAL)	6544	AE	2.5	150		6185	6200 6185
771014	77007.0	TEST	#2 TORQUE TRANSDUCER(CAL)	6544	AE	2.5	150		6185	6200 6185
792013	79006.0	REPLACE	ENGINE OIL FILTER	W85B021	01 AD	3.5	150		6185	6200 6185
720001	72001.0	INSPECT	ENGINE PERIODIC	W84L013	02 AD	6.0	150		6192	6207 6192
725052	72015.1	INSPECT	IBPT BLADE DISPLACEMENT	SC20480	02 AD	3.0	150		6192	6207 6192
725085	72012.1	TEST	NO. 2 & 3 BRG OIL JETS	W84J013	02 AD	2.5	150		6192	6207 6192
761020	76001.5	CHECK	ENGINE POWER ASSURANCE	W84L013	02 AD	3.0	150		6192	6207 6192
792013	79006.0	REPLACE	ENGINE OIL FILTER	W84L013	02 AD	3.5	150		6192	6207 6192
761019	76001.0	CHECK	ENGINE TOPPING	W84L013	02 AD	3.0	150		6207	6222 6207
790060	79006.0	REPLACE	ENGINE OIL	W85B021	01 AD	2.0	150		6207	6222 6207
790060	79006.0	REPLACE	ENGINE OIL	W84L013	02 AD	2.0	150		6207	6222 6207
120011	12001.1	INSPECT	MAGNETIC PLUGS/CHIP DET	6544	AD	2.5	75		6209	6216 6209
710025	71003.0	INSPECT	AXIAL COMPRESSOR	W85B021	01 AD	2.5	75		6209	6216 6209

\* INDICATES A COMPONENT WITH A QUESTIONABLE PART NUMBER. THE PART NUMBER OF THIS COMPONENT SHOULD BE VERIFIED AT THE NEXT SCHEDULED MAINTENANCE OF THIS PART. CONTACT THE ACMS CONTRACTOR TO UPDATE THIS COMPONENT'S PART NUMBER.

**Questions**

Answer the following questions on ACMS reports:

1. For additional information about types of reports and information contained in the ACMS refer to the \_\_\_\_\_,  
\_\_\_\_\_.
  
  2. The common reports that are frequently generated by the ACMS user are \_\_\_\_\_,  
\_\_\_\_\_ and  
\_\_\_\_\_.
  
  3. All uninstalled serial number tracked components must be accompanied by its \_\_\_\_\_.
  
  4. The MDL report is printed \_\_\_\_\_  
at a minimum, for each aircraft assigned to the unit.
  
  5. The MDL computer generated report shows the projected scheduled maintenance of calendar and hourly tasks for a  
\_\_\_\_\_ operating period.
-



**Feedback**

Compare your answers to the feedback provided below. If you had trouble with this self-quiz, please review the appropriate section of this assignment.

Question	Answer	Reference
1.	CGTO PG-85-00-10	3
2.	Configuration Report, Maintenance Due List, Significant Component History Report	3
3.	Significant Component History Report	6
4.	monthly	8
5.	two month	8

**Performance**

ANALYZE Aviation Computerized Maintenance System.

---

**References**

Perform objectives listed below IAW one or more of the following references:

- Aeronautical Engineering Maintenance Management Manual, COMDTINST M13020.1 (series)
  - ACMS User's Guide, CGTO PG-85-00-10
- 

**Performance Objective 1**


Given access to the Aviation Computerized Maintenance System (ACMS), **OBTAIN** the pertinent history data reports.

---

**Performance Objective 2**

Given the pertinent history report, **INTERPRET** data.

---

**Performance Objective 3**

Given the pertinent history report, **IDENTIFY** trends and problem areas.

---







**Performance**

ORDER technical publications, directives, and manuals applicable to rating.

---

**References**

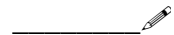
Perform the objectives listed below IAW one or more of the following references:

- Aeronautical Engineering Maintenance Management Manual, COMDTINST M13020.1 (series), Chapter 5
  - Directives, Publication and Reports Index, COMDTNOTE 5600
  - Local station instructions (as applicable)
- 

**Performance  
Objective 1**

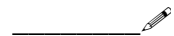
**STATE** the local procedures for ordering publications through the TIMOS via the Technical Librarian.

---

**Performance  
Objective 2**

**COMPLETE** the form for ordering publications as explained in Chapter 1 of the Directives, Publications, and Reports Index (DPRI), COMDTNOTE 5600 and explain the proper routing of the form.

---





## Objectives

To successfully complete this assignment, you must study the text and master the following objectives:

- **LIST** the four characteristics covered by a Pyrotechnic Deterioration Prevention Plan.
- **IDENTIFY** how often the Weapons Petty Officer should perform a Magazine Material Safety Inspection.
- **LIST** a minimum of three events that may require the need for a Pyrotechnic Visual Inspection.
- **IDENTIFY** tasks performed during a Pyrotechnic Visual Inspection.
- **STATE** in writing the instructions for handling pyrotechnics that have been exposed to moisture.
- **IDENTIFY** what instruction is referred to for pyrotechnic disposal.
- **IDENTIFY** who is notified if abnormal or unusual conditions are found in the magazine area.
- **STATE** in writing where completion of pyrotechnic visual inspections are documented.
- **LIST** a minimum of three general guidelines that assist in the prevention of pyrotechnic deterioration.

---

## Reference

The information in this assignment can be found in the following references.

Small Arms Manual, COMDTINST M8370.11 (series)

Pyrotechnics, Screening and Marking Devices, NAVAIR 11-15-7

Ammunition Ashore, Handling, Stowing, and Shipping Manual, NAVSEA OP 5 (Vol. 1)

---

**Introduction**

As an AST1 you will be required to develop a pyrotechnics deterioration prevention plan for your unit. The plan's effectiveness and quality will be determined by your knowledge of pyrotechnics and Coast Guard regulations covered by the plan. Additional information concerning (storage and handling) may be found in 6.D.01 of this pamphlet.

---

**How to Proceed**

To complete the objectives of this assignment, reading assignments have been provided. After finishing all of the reading assignments, complete the Pyrotechnic Deterioration Prevention Self Quiz.

---

**In This Assignment**

This assignment contains the following:

Subject	Page
Pyrotechnic Deterioration Prevention Plan .....	3
Visual Inspections for Pyrotechnic Deterioration .....	5
General Prevention Guidelines.....	7
Pyrotechnic Deterioration Prevention Self-Quiz.....	9
Pyrotechnic Deterioration Prevention Self-Quiz Feedback.....	12
Syllabus .....	14

---

## Introduction

Failure to properly care for pyrotechnics may lead to mishaps or could cause the devices to become unserviceable and necessitate their disposal. Therefore it is imperative to develop and adhere to a pyrotechnic deterioration prevention plan that is tailored to your units physical needs.

---

## Coast Guard Policy on Pyrotechnic Deterioration Hazards

The pyrotechnics used in Coast Guard aviation contain combustible chemicals which react violently and dangerously under certain conditions. The hazards inherent in these reactions are frequently increased by such factors as:

- age
  - improper storage conditions
  - rough handling
  - moisture penetration
  - excessive temperatures
  - damage to shipping containers.
- 

## Pyrotechnic Deterioration Prevention Plan Format

Normally a pyrotechnic deterioration prevention plan will be developed in the format of a “Station Instruction”, and inspection checklists.

---

## Characteristics of an Effective Pyrotechnic Deterioration Prevention Plan

Effective methods for preventing pyrotechnic deterioration rely on an aggressive plan that utilizes the following characteristics:

- When to perform a pyrotechnic visual inspection
  - Special consideration for the units geographic location
  - Special consideration for the units type of storage facilities
  - Pyrotechnic visual inspection criteria (what to look for)
  - Corrective actions taken to upgrade deficiencies
  - Documentation requirements
- 

Continued next page

**When to Perform  
Pyrotechnic  
Visual  
Inspections**

Pyrotechnic visual inspections shall be performed using the following guidelines:

- The Weapon Petty Officer (normally the Survival shop ASTC) shall perform a Magazine Material Safety Inspection at least once a week. A full pyrotechnic visual inspection may be required based on results of that inspection.
  - As needed due to events such as flooding, lighting strikes, extended periods of high temperatures and/or high humidity, sprinkler system discharge.
  - During the annual pyrotechnic inventory
-

**Introduction**

Deterioration of pyrotechnics relies heavily on effective visual inspections. In this assignment the criteria for pyrotechnic visual inspections and general guidelines for correcting discrepancies found during a visual inspection will be covered.

---

**Pyrotechnic  
Visual Inspection  
Criteria**

Pyrotechnics Visual Inspections shall include, but are not limited to the following:

- Pyrotechnics in open or non-moisture proof containers shall be inspected for corrosion on the cases, dents, swelling or punctures of the seals, condition of primers, missing safety pins, fuses set to “safe” frayed pull lanyards, and the presence of chemical odors.
- Inspect the package condition and expiration date for pyrotechnics in moisture-proof packages only. If the integrity of the “moisture proof” package is in doubt, open the package and inspect as stated in the above step.
- Check for legibility of Lot Numbers on the pyrotechnics if they are in an open container, if the container is sealed check the number stamped on the container.
- Lot Numbers should also be cross-checked with the Naval Ammunition Reclassification Manual (NARs).

**NOTE**

Containers that have closure seals intact do not need to be opened during a visual inspection unless the integrity of the container is in question.

---

Continued next page



## **6.A.01      Visual Inspections for Pyrotechnic Deterioration (Continued)**

---

### **Correcting Discrepancies**

General discrepancy corrective actions are as follows:

- Discrepancies noted during a Magazine Material Safety Inspection and Pyrotechnic Visual Inspection shall be corrected immediately.
- Segregate pyrotechnics that have been exposed to moisture until they are proven serviceable.
- Pyrotechnics that have been damaged or have illegible Lot Numbers shall be segregated until they may be disposed of IAW District OPLAN.
- Place any loose pyrotechnics in a storage container.
- Noted discrepancies to the ventilation and electric systems, and water leakage in the storage area shall be repaired immediately.
- Any abnormal or unusual conditions will be brought to the Survival shop chiefs and OODs attention. Additional guidance may be requested from the District Armory.

---

### **Documentation of Pyrotechnic Visual Inspections**

Completion of pyrotechnic visual inspections shall be documented in the Magazine Log or the magazine section of the Ordnance Log. Depending on individual unit requirements a memorandum of completion of the inspection may also be required.

---

**Introduction**

“An ounce of prevention is worth a pound of cure.” Good housekeeping and the following procedures are essential to pyrotechnic deterioration prevention. By keeping your magazine area clean and dry, you can dramatically cut down on the chance of pyrotechnics deteriorating.

---

**General  
Prevention  
Guidelines**

Good housekeeping starts with a plan. Below is a list of general housekeeping guidelines that you should follow. Always ensure that:

- water is removed, locate and fix the source immediately
  - loose pyrotechnics are stored in containers
  - temperature checks are completed as required
  - humidity readings are taken as local area conditions require
  - magazines are cleaned on a routine schedule
  - vents are clear and in good repair
-



**Questions**

1. List at least four characteristics covered by a pyrotechnic deterioration prevention plan?
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_
  - c. \_\_\_\_\_
  - d. \_\_\_\_\_
2. A Magazine Material Safety Inspection should be performed by the Weapons Petty Officer at least once every \_\_\_\_\_.
  - a. Day
  - b. Week
  - c. Month
  - d. Quarterly
3. List at least three events that may require the need for a pyrotechnic visual inspection?
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_
  - c. \_\_\_\_\_
4. Pyrotechnics that are in any open containers shall be visually inspected for \_\_\_\_\_.
  - a. corrosion on the cases
  - b. legibility of stock number
  - c. fuses set to "safe"
  - d. a and c are correct
5. What instruction provides disposal procedures for pyrotechnics that have been damaged by moisture? \_\_\_\_\_
6. Who should be notified if any abnormal or unusual conditions are found in the magazine area?
  - a. Duty Rescue Swimmer
  - b. Watch Captain
  - c. OOD
  - d. Notification is not required

---

Continued next page

## **6.A.01      Pyrotechnic Deterioration Prevention Self-Quiz (Continued)**

---

### **Questions (Continued)**

7. Where is the completion of a pyrotechnics visual inspection documented? \_\_\_\_\_  
\_\_\_\_\_

8. List at least three general guidelines that assist in the prevention of pyrotechnic deterioration.

- a. \_\_\_\_\_
  - b. \_\_\_\_\_
  - c. \_\_\_\_\_
- \_\_\_\_\_



## 6.A.01 Pyrotechnic Deterioration Prevention Self-Quiz Feedback

### Feedback

Compare your answers to the feedback provided below. If you had trouble with this self-quiz, please review the appropriate section of this assignment.

Question	Answer	Reference
1.	Any four of the below items are correct: <ul style="list-style-type: none"><li>• When to perform a pyrotechnic visual inspection</li><li>• Special consideration for the units geographic location</li><li>• Special consideration for the units type of storage facilities</li><li>• Pyrotechnic visual inspection criteria (what to look for)</li><li>• Corrective actions taken to upgrade deficiencies</li><li>• Documentation requirements</li></ul>	Pg. 3
2.	b	Pg. 4
3.	Any three of the below items are correct: <ul style="list-style-type: none"><li>• Flooding</li><li>• Lighting strikes</li><li>• Extended periods of high temperatures</li><li>• Extended periods of high humidity</li><li>• Sprinkler system discharge</li></ul>	Pg. 4
4.	d	Pg. 5
5.	District OPLAN	Pg. 6

---

Continued next page

## Pyrotechnic Deterioration Prevention Self-Quiz Feedback (Continued)

---

### Feedback (Continued)

Compare your answers to the feedback provided below. If you had trouble with this self-quiz, please review the appropriate section of this assignment.

Question	Answer	Reference
6.	c	Pg. 6
7.	In the Magazine Log or the magazine section of the Ordnance Log.	Pg. 6
8.	Any three of the below items are correct: <ul style="list-style-type: none"> <li>• Water is removed, locate and fix the source immediately</li> <li>• Loose pyrotechnics are stored in containers</li> <li>• Temperature checks are completed as required</li> <li>• Humidity readings are taken as local area conditions require</li> <li>• Magazines are cleaned on a routine schedule</li> <li>• Vents are clear and in good repair</li> </ul>	Pg. 7

---



**Performance**


PREPARE a plan to prevent deterioration of pyrotechnics.

---

**Performance  
Objective 1**


Given the task of preparing a pyrotechnics deterioration prevention plan, **INSPECT** current unit pyrotechnic storage facilities IAW the Small Arms Manual, COMDTINST M8370.11 (series); Pyrotechnics, Screening and Marking Devices, NAVAIR 11-15-7; and the Ammunition Ashore, Handling, Stowing, and Shipping Manual, NAVSEA OP 5 (Vol. 1).

---

**Performance  
Objective 2**


Given the results of pyrotechnic storage facilities inspection, **ANALYZE** the results with current pyrotechnics deterioration prevention plan (if available) and Small Arms Manual, COMDTINST M8370.11 (series) and Pyrotechnics, Screening and Marking Devices, NAVAIR 11-15-7 for deterioration prevention improvements.

---

**Performance  
Objective 3**


Given the results of pyrotechnic storage facilities inspection and current unit policy analysis, **DEVELOP** a unit pyrotechnics deterioration prevention plan IAW Small Arms Manual, COMDTINST M8370.11 (series) and Pyrotechnics, Screening and Marking Devices, NAVAIR 11-15-7.

---

**Performance  
Objective 4**

Given the new or updated unit pyrotechnics deterioration prevention plan, **SUBMIT** the plan through the unit chain-of-command for approval IAW the Small Arms Manual, COMDTINST M8370.11 (series).

---



**Objectives**

To successfully complete this assignment, you must study the text and master the following objectives:

- **SELECT** the proper form used for documenting monthly required physical fitness training.
- **IDENTIFY** regulations concerning EMT certification and recertification.
- **IDENTIFY** the maximum allowable time limit between Rescue Swimmer standardization checks.
- **LIST** in writing the requirements for participation as a survivor during rescue swimmer training .
- **STATE** in writing the effect of non-compliance of Rescue Swimmer training requirements has on receiving Special Duty Assignment Pay.
- **IDENTIFY** the proper step(s) for correcting non-compliance of R/S training requirements.
- **IDENTIFY** the minimum weekly Physical Fitness (PT) workout requirements.
- **IDENTIFY** the minimum weekly swim workout requirements.
- **IDENTIFY** the minimum EMT training requirements.
- **IDENTIFY** the minimum equipment and lifesaving drill requirements.
- **IDENTIFY** how often Bloodborn Pathogen training is required
- **IDENTIFY** the minimum quarterly flight requirements.
- **IDENTIFY** how long R/S Training records and Physical Screening Exams are to be maintained.

---

Continued next page

**Reference**

The information in this assignment can be found in the following references.

COMDTINST M3710.4 (series) Coast Guard Helicopter Rescue Swimmer Manual

COMDTINST M3710.1 (series) Coast Guard Air Operation Manual

---

**Introduction**

As an AST1 you may required to implement, monitor and manage your units Rescue Swimmer (R/S) training program. Your success will determine the success of your training program. By knowing the requirements and enforcing them, you will have no trouble during the R/S Stan Team visits.

---

**How to Proceed**

To complete the objectives of this assignment, reading assignments have been provided. After finishing all of the reading assignments, complete the Rescue Swimmer Training Self-Quiz.

---

**In This Assignment**

This assignment contains the following:

Subject	Page
Rescue Swimmer Training Management .....	4
Rescue Swimmer Training Requirements .....	7
Improving EMT Training .....	9
Rescue Swimmer Training Program Self-Quiz.....	11
Rescue Swimmer Training Program Self-Quiz Feedback.....	15
Syllabus .....	17

---

**Introduction**

The goal of the unit R/S training program manager is to work with the shop chief to create a balance between aircraft rescue/survival equipment maintenance and the R/S training requirements. If this is done properly your units aircraft rescue/survival equipment will always be ready, and the Rescue Swimmers will be technically competent, physically and mentally fit for deployment at a moments notice.

---

**Unit R/S Training Program Manager Responsibilities**

Normally the senior qualified Rescue Swimmer AST1 will be assigned as the unit R/S training program manager. As a unit R/S training program manager, your supervisory responsibilities include but not limited to the following:

- Work well with coworkers. Demonstrate a strong understanding of instructional techniques. Demonstrate an above-average ability to organize the administrative details of this program.
  - Coordination with the survival shop chief to create a balance between aircraft rescue/survival equipment maintenance and the R/S training requirements.
  - Coordination with the Operations Department R/S flights for minimum recurrent training requirements and R/S designation flight requirements.
  - Coordination with the survival shop chief for setting up swimming pool access, as applicable for your unit.
  - Schedule survival shop personnel as instructors for recurrent EMT training lecture and practical requirements.
  - Provide the survival shop supply petty officers with R/S training equipment procurement requests.
  - Provide monthly documentation of completed and non-completed R/S training through your units R/S training review process.
  - Organize and maintain units R/S training records.
- 

Continued next page

**Unit R/S Training  
Program Manager  
Responsibilities  
(Continued)**

- Coordination of training activities with the following:
    - survival shop chief and the unit's Training Department
    - R/S Stan Team visits
    - EMT recertification
    - advance R/S training (ice rescue and the Coast Guard Advance Rescue School).
- 

**Training  
Documentation  
Forms**

The only authorized form used for documentation of completed Rescue Swimmer training (physical, EMT, deployment, equipment and lifesaving drills) is located in the Coast Guard Helicopter Rescue Swimmer Manual, COMDTINST M 3710.4 (series) ANNEX I. This form should be routed through your units R/S training review process at the end of each month.

---

**Physical Fitness  
Training**

Because of shop maintenance, leave, duty, flying, and other commitments, it is not feasible for a whole shop to form-up and perform group physical fitness training. Although as the unit R/S training program manager you should strongly encourage a PT "Buddy" system. The benefits of this system are safety, accountability, team-building, and esprit de corps.

---

**In-Water Training**

There is great potential for a mishap during in-water training evolution's. For this reason, special care must be taken to ensure that all safety measures outlined in the Coast Guard Helicopter Rescue Swimmer Manual, COMDTINST M3710.4 (series) and specific equipment operation manuals are stringently adhered to. Everyone shall be alert for other individuals who appear to be experiencing difficulty, and at no time should you hesitate to stop training.

---

Continued next page

**Shallow Water  
Blackout Hazard****WARNING**

Do not hyperventilate prior to underwater swims. Hyperventilation can lead to shallow water blackout.

During R/S in-water training, underwater swim exercises that are required are of short distances and times. The ability to hold your breath for long periods of time is not needed to complete these exercises.

---

## Introduction

The information in the following reading assignments, provides the requirements for qualification and recurrent training for Coast Guard Helicopter Rescue Swimmers.

---

## R/S Training Requirements Reading Assignment

Read the following information in the Coast Guard Helicopter Rescue Swimmer Manual, COMDTINST M3710.4 (series):

### CHAPTER: 1 GENERAL POLICIES AND DEFINITIONS

- SECTION: G. Training Requirements  
H. EMT Certification  
I. RS Qualification (paragraphs 1, 2 and 3)  
J. RS Survivor Qualification  
K. Special Duty Assignment Pay (SDAP)

### CHAPTER: 3 HELICOPTER RESCUE SWIMMER TRAINING REQUIREMENTS

(Read the entire chapter)

---

## Rescue Swimmer Designation Requirements

To be designated a Rescue Swimmer, an individual must have completed all requirements for Basic Aircrew in the HH-60J or FM in the HH-65A up to, but not including the flight phases. In addition, an individual must:

- Complete the Coast Guard AST/rescue swimmer school
- Complete the Coast Guard syllabus for Rescue Swimmer for aircraft type
- Complete certification as a Coast Guard EMT

### NOTE

Rescue Swimmers previously designated in one helicopter type may be assigned duty standing in a new type aircraft while completing the requirements listed above, but not to exceed 60 days.

---

Continued next page



**Aircrew  
Recurrent  
Training  
Requirements**

In addition to the recurrent Rescue Swimmer flight training requirements listed in the Coast Guard Helicopter Rescue Swimmer Manual, COMDTINST M3710.4 (series), the following minimum recurrent flight and ground training is necessary to maintain proficiency IAW the Coast Guard Air Operation Manual, COMDTINST M3710.1 (series).

**48 MONTH**

- 9D5 Dunker

**CALENDAR YEAR**

- Swim test
  - Wet drill
  - Egress Breathing Device/Shallow Water Egress Training (SWET)
  - Emergency ground egress
  - SAR equipment and pyrotechnics
  - OPSEC/COMSEC training
  - Operational hazard awareness training
  - Land survival training
  - Crew Resource Management (CRM)
-

### Introduction

All ASTs have been previously trained in the instructional training methodology, therefore require them to use these methods for the preparation and presentation of their training assignments.

---

### EMT Training Improvement Ideas, (or guidelines)

As a supervisor you should also make it a point to review their lesson plans a few days before they are scheduled to present the training. Additional EMT training improvement ideas are as follows:

- Save good lesson plans and student handouts for future use.
  - Network with other units R/S training program managers to share lesson plans, student handouts, and equipment information.
  - The EMT School is a wealth of knowledge for EMT training information, **use it**.
  - Make the EMT practical training as realistic as possible, come up with mishap scenarios that may occur at your unit (person fell from a ladder on the hanger deck). Keep in mind, at most air stations an AST will be the first medical person on scene to an accident at your unit.
  - Use a basic Casualty Simulation Kit and old uniforms from a DRMO or consignment shop (cloths that don't sell) to add realism to the practical scenarios.
  - Check area hospitals, fire departments, and ambulance services for available training exercises and seminars.
-



**Questions**

1. What form is provided in the Coast Guard Helicopter Rescue Swimmer Manual for documenting required monthly physical fitness training is \_\_\_\_\_.

- a. ANNEX G
- b. ANNEX H
- c. ANNEX I
- d. ANNEX J

2. How many days do you have to reapply for a retest after notification of failure of the initial National Registry EMT certification or recertification tests?

- a. 15
- b. 30
- c. 45
- d. 60

3. Who is responsible for obtaining National Registry EMT, recertification training for Rescue Swimmers?

- a. Unit R/S training manager
- b. Unit training officer
- c. Unit commanding officer
- d. Commandant G-(OCA)

4. Petty Officer Mark Fin completed a Rescue Swimmer standardization check on 01 MAY 98. When is his next standardization check required to be completed?

- a. 01 MAY 99
- b. 01 JUN 99
- c. 01 JUL 99
- d. 01 AUG 99

5. List the requirements for participation as a survivor on rescue swimmer training flights?

- (a) \_\_\_\_\_
- (b) \_\_\_\_\_
- (c) \_\_\_\_\_

---

Continued next page

**Questions  
(Continued)**

6. What would happen to an individual's eligibility for Special Duty Assignment Pay (SDAP) if they were in non-compliance of physical training requirements? \_\_\_\_\_
7. Petty Officer Snorkel just returned from 45 days TAD, and Petty Officer Blade was cleared for flight-duty after being grounded 60 days for broken ribs. Prior to returning to the rescue swimmer duty rotation, they must complete a \_\_\_\_\_?
- a. monthly screen exam
  - b. monthly EMT practical test
  - c. standardization check
  - d. urinalysis test
8. If a swimming pool is unavailable, the Rescue Swimmer shall complete the PT workout \_\_\_\_\_ in a 7-day period.
- a. 2
  - b. 3
  - c. 4
  - d. 5
9. The PT workout is designed to be completed in a \_\_\_\_\_-minute period.
- a. 30
  - b. 45
  - c. 60
  - d. 90
10. The 50 yard Cross Chest Buddy Tow and the 50 yard Equipment Tow are completed consecutively with a maximum of \_\_\_\_\_-seconds rest between swims.
- a. 30
  - b. 60
  - c. 90
  - d. 120

---

Continued next page

**Questions  
(Continued)**

11. EMT recertification is required every \_\_\_\_ months.
- a. 12
  - b. 24
  - c. 36
  - d. 48
12. How many times during a calendar month is EMT recurrent practical training required?
- a. 1
  - b. 2
  - c. 3
  - d. 4
13. EMT's are required to take recurrent Bloodborne Pathogens training \_\_\_\_.
- a. weekly
  - b. monthly
  - c. quarterly
  - d. yearly
14. Rescue Swimmers are required to participate at least one time in Harness/parachute disentanglement training \_\_\_\_.
- a. monthly
  - b. quarterly
  - c. semi- annually
  - d. annually
15. The Rescue Swimmer Training Records and Physical Screening Exams must be maintained on file for a minimum of \_\_\_\_ months.
- a. 6
  - b. 12
  - c. 18
  - d. 24
-



**Feedback**

Compare your answers to the feedback provided below. If you had trouble with this self-quiz, please review the appropriate section of this assignment.

Listed references are as follows:

- (1) Coast Guard Helicopter Rescue Swimmer Manual, COMDTINST M3710.4 (series)
- (2) Coast Guard Air Operation Manual, COMDTINST M3710.1 (series)

Question	Answer	Reference
1.	c	Pg. 6
2.	b	(1)
3.	c	(1)
4.	d	(1)
5.	(a) Must be active duty military (b) Complete the survivor brief and questionnaire (Annex E) with a qualified R/S. (c) Receive a egress brief in the helicopter to be used	(1)
6.	They would not be eligible to receive the pay.	(1)
7.	a	(1)
8.	b	(1)
9.	c	(1)
10.	c	(1)
11.	b	(1)
12.	a	(1)

---

Continued next page



**6.A.02****Rescue Swimmer Training Program Self-Quiz Feedback (Continued)**

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**Feedback  
(Continued)**

The following is a continuation of the self-quiz feedback:

<b>Question</b>	<b>Answer</b>	<b>Reference</b>
13.	d	(1)
14.	c	(1)
15.	c	(1)

---

<b>Performance</b>	ORGANIZE and IMPLEMENT unit Rescue Swimmer training program.
<b>Introduction</b>	Personnel assigned to units with only fixed-wing aircraft, may complete this qualification through the “Non-duty standing Rescue Swimmer requirements program. Personnel not assigned to an air station shall refer to the Enlisted Qualification Manual, COMDTINST M1414.8 (series) for waiver instructions.
<b>Performance Objective 1</b>	Given the task of organizing an air stations Rescue Swimmer Training program, <b>PROVIDE</b> training schedules and logistic requirements for all phases of the program IAW the Coast Guard Helicopter Rescue Swimmer Manual COMDTINST M3710.4 (series).
<b>Performance Objective 2</b>	Given an AST required to obtain a Rescue Swimmer aircrew designation, <b>SUPERVISE</b> the individuals training program to a successful completion of the qualification training IAW the Coast Guard Helicopter Rescue Swimmer Manual, COMDTINST M3710.4 (series); Coast Guard Air Operation Manual, COMDTINST M3710.1 (series): and applicable aircraft aircrew qualification syllabus.
<b>Performance Objective 3</b>	Given the task of providing continuing Emergency Medical Technician (EMT) training requirements, <b>SUPERVISE</b> the development of EMT training lesson plans IAW the Coast Guard Helicopter Rescue Swimmer Manual, COMDTINST M3710.4 (series).
<b>Performance Objective 4</b>	Given a Rescue Swimmer training requirements compliance form, <b>DOCUMENT</b> completion of required Rescue Swimmer training IAW the Coast Guard Helicopter Rescue Swimmer Manual, COMDTINST M3710.4 (series).



### Objectives

To successfully complete this assignment, you must study the text and master the following objectives:

- ? **SELECT** codes that identify authorized air station pyrotechnics.
  - ? **IDENTIFY** where to locate the air station allowance for each type of pyrotechnics.
  - ? **IDENTIFY** proper requisition procedures for ordering pyrotechnics.
  - ? **SELECT** the correct routing procedure for pyrotechnics requisitioning.
- 

### References

The information in this assignment can be found in the following manuals.

Small Arms Manual, COMDTINST M8370.11 (series)

Coast Guard Air Operations Manual, COMDTINST M3710.1 (series)

Conventional Ammunition Integrated Management System (CAIMA)  
SPCCINST 8010.12 (series)

---

**Introduction**

As an AST1 you will be required to requisition pyrotechnics for your unit. Your ability to correctly calculate your air stations allowance and complete the required paperwork will prevent the unit from experiencing shortages during a critical operational evolution.

---

**How to Proceed**

To complete the objectives of this assignment, read this section thoroughly and complete the practical exercises. After finishing all of the reading and practical assignments, complete the Requisitioning Pyrotechnics Self Quiz.

---

**In This Assignment**

This assignment contains the following:

Subject	Page
Pyrotechnics Requisitioning.....	3
Ordering Pyrotechnics .....	5
Requisitioning Pyrotechnics Self Quiz.....	6
Requisitioning Pyrotechnics Feedback.....	8
Syllabus .....	9

---

**Introduction**

Using the information in the following reading assignments, you should be able to requisition pyrotechnics.

---

**Guidelines for Understanding Allowances**

Before you can order any pyrotechnics, you need to know your units onboard allowance. This allowance is based on the following:

- ? number and types of aircraft at the unit
- ? number and types of rescue kits and survival vests your unit is required to maintain
- ? average usage for annual SAR and training requirements
- ? plus a 10 percent excess.

You find the allowance information on the Ammunition Master Stock Record Card, NAVSUP Form 1296. This card will list all the pyrotechnics onboard the station and the allowance, as set by district, for each type of pyrotechnics. The Ammunition Master Stock Record Card will be covered in more detail in 6.D.01 Handling, Stowage and Security assignment of this pamphlet.

---

**Scenario 1**

You're at CGAS Dreambillet with 3 HH-65's. During a night training flight the HH-65 crew deployed 3 MK-25's. After the flight AST3 Smith logged the expenditures on the MK-25 Ammunition Master Stock Record Card, NAVSUP Form 1296. The next morning, the shop chief tasked you with ordering more MK-25's to bring the unit back up to the correct allowance. First off, you will need to determine how many flares you need to order.

**NOTE**

The figures given in the following text are not actual allowances of pyrotechnics authorized at any particular Coast Guard air station. The numbers are representative only for the completion of the assignment objectives. The Small Arms Manual, COMDTINST M8370.11 (series), the Air Operations Manual, COMDTINST M3710.1 (series) and your District office will set the actual air station pyrotechnic allowances.

---

Continued next page

**Scenario 1  
(Continued)**

The following information was found on the Ammunition Master Stock Record Card:

Flare Type	On Hand	Allowance
MK-58	10	10
MK-25	39	50
MK-124	58	58
MK-79	20	20

To figure how many MK-25's, subtract the 39 on hand from the allowance amount. In this case you would order 11 MK-25's.

This is the same procedure you will perform whenever you need to order pyrotechnics. Now you know how to find your allowance, let's order some pyrotechnics.

**About  
DODIC/NALC**

When ordering your pyrotechnics, the stock number is not as important as the **Department of Defense Identification Code/Naval Ammunition Logistics Code**. The correct DODIC/NALC will ensure you receive the most current "in-use" pyrotechnics. When filling out the DD Form 1149, the name of the pyrotechnics and the DODIC/NALC code would be written on the description line.

**Guidelines for  
Understanding  
DODIC/NALC  
Codes**

The following codes are for the most recent pyrotechnic models in-use today.

L258	MK-80
L283	MK-124
L554	MK-25
L585	MK-58

**NOTE**

Replacement of entire MK-79 Signal Kits are not authorized. Retain the MK-31 Projector from expended kits, and reorder flares using L258, MK-80 signals (7 ea.).

The DD Form 1149, shown below, is used to order pyrotechnics. The following table will guide you through the process of completing the form.

Step	Action
1.	Determine type and quantity of pyrotechnics you need to order.
2.	Fill in blocks 1-10 of the DD Form 1149.
3.	Submit form directly to your local District armory.

Below is a Example of a DD-Form 1149.

[illegible]



**Questions**

1. What determines the air station pyrotechnic allowance?
    - a. SAR load
    - b. Training load
    - c. Number and type of aircraft at the unit
    - d. All the above
  
  2. Where do you find an air station's specific pyrotechnic allowance?
    - a. Lot Locator Card
    - b. Small Arms Manual
    - c. Ordnance Manual
    - d. Ammunition Master Stock Locator Card
  
  3. What codes need to be placed on the description line of the pyrotechnic requisition form?
    - a. Zip
    - b. DODIC/NALC
    - c. Area
    - d. Ordnance
  
  4. What form is used to order pyrotechnics?
    - a. DD1038
    - b. CG1149
    - c. DD1149
    - d. CG1539
  
  5. Where does the completed pyrotechnic requisition form go?
    - a. Supply
    - b. Support Center Armory
    - c. District
    - d. Headquarters G-0CU-3
-



**Feedback**

Compare your answers to the feedback provided below. If you had trouble with this self-quiz, please review the appropriate section of this assignment.

Question	Answer	Reference
1.	d	Pg. 3
2.	d	Pg. 3
3.	b	Pg. 4
4.	c	Pg. 5
5.	c	Pg. 5

**Performance**

REQUISITION air station pyrotechnics.

---

**Introduction**


To ensure your annual pyrotechnic allowance is sufficient to maintain operational readiness, an accurate calculation of the needed pyrotechnics is important. This will aid district in determining your actual pyrotechnic allowance and expedite the requisitioning process. Personnel not assigned to an air station shall refer to the Enlisted Qualification Manual, COMDTINST M1414.8 (series) for waiver instructions.

---

**Performance  
Objective 1**


Given the Small Arms Manual, COMDTINST M8370.11 (series), Air Operations Manual , COMDTINST M3710.1 (series), Search and Rescue and Training load projections, and a 10 % excess, **CALCULATE** the air stations pyrotechnics allowance.

---

**Performance  
Objective 2**


Given an air station allowance of pyrotechnics and a DD Form 1149, **REQUISITION** enough pyrotechnics to bring the air station back to the proper allowance.

---

**Performance  
Objective 3**

**ROUTE** a completed DD Form 1149, through the proper chain of command to secure a requisition for pyrotechnics.

---





### Objectives

To successfully complete this assignment, you must study the text and master the following objectives:

- **SELECT** the correct definition for each type of ammunition condition code.
  - **IDENTIFY** when an Ammunition Transaction Report is required to be transmitted.
  - **SELECT** the correct components for completing an Ammunition Transaction Report.
  - **SELECT** the correct routing procedure for Ammunition Transaction Reports
- 

### References

The information in this assignment can be found in the following manuals.

Small Arms Manual, COMDTINST M8370.11 (series)

Ordnance Manual, COMDTINST M8000.2 (series)

Air Operations Manual, COMDTINST M3710.1 (series)

Conventional Ammunition Integrated Management System (CAIMA)  
SPCCINST 8010.12 (series)

---

**Introduction**

As an AST1, you will be required to report when pyrotechnics are received, sent to other units, expended, lost, or when their usable condition has changed. These actions are recorded using an **Ammunition Transaction Report (ATR)**. Your ability to complete an ATR and knowing when to transmit the information to your reporting authority will ensure your Group/District is kept informed on the quantity and type of pyrotechnics you have on board.

---

**How to Proceed**

To complete the objectives of this assignment, read this section thoroughly and complete the practical exercises. After finishing all of the reading and practical assignments, complete the Ammunition Transaction Reports Self-Quiz.

---

**In This Assignment**

This assignment contains the following:

Subject	Page
ATR Expenditure Codes.....	3
Naval Ammunition Reclassification and Codes.....	4
How to Complete an ATR on SWS III.....	6
ATR Routing and Reporting.....	14
Ammunition Transaction Reports Self-Quiz.....	17
Ammunition Transaction Reports Self-Quiz Feedback.....	21
Syllabus .....	22

---

## Introduction

Using the information in the following reading assignments, you should be able prepare an ATR.

---

## Characteristics of Ammunition Transaction Reports

Some of the important characteristics about ATRs are they report on:

- pyrotechnic transactions at your air station.
  - expenditure of pyrotechnics
  - receipt of pyrotechnics
  - transfer of pyrotechnics
  - on reclassification of pyrotechnics and the annual inventory.
- 

## Reasons to Submit an ATR

Some reasons for submitting an ATR are as follows:

- Expenditure
  - Reclassification
  - Annual inventory (1 February, IAW your DIST OPLAN)
- 

## ATR Expenditure Codes

ATR expenditure codes are the letter designator that will put your pyrotechnics in a specific classification for ATR reporting purposes.

The ATR expenditure codes are below.

<b>C</b>	Receipts and gains in inventory
<b>D</b>	Issues to other activities
<b>E</b>	Combat expenditures
<b>F</b>	Training expenditures (swimmer ops, drop training)
<b>G</b>	Test and Evaluation expenditures
<b>H</b>	Operational expenditures (SAR)
<b>I</b>	Disposal expenditures (not a transfer to an activity for disposal)
<b>J</b>	Loss by Inventory expenditures
<b>K</b>	Transfer Out of System expenditures

Condition codes C, F and H are used most often.

---



**Introduction**

Using the information in the following reading assignments, you should be able understand what a Naval Ammunition Reclassification (NAR) is used for, and what the codes represent.

---

**Definition of a NAR**

The NAR is a message transmitted to all activities with naval ammunition, pyrotechnic, or Cartridge Actuated Device (CAD) inventories.

---

**Characteristics of NAR**

The Naval Ammunition Reclassification is used to reclassify condition codes for:

- Ammunition
  - Pyrotechnics
  - CAD
- 

**Purpose of the NAR Message**

The purpose for the reclassification message is to inform activities that ammunition materials should be . . .

- used only for training
  - completely removed from service
  - have immediate inspection performed
  - reinstate ammunition materials back to an ALPHA status
- 

**Other Considerations**

Other important points to remember about the NAR messages are as follows:

- Only those messages that reclassify ammunition, pyrotechnics or CAD's in use by your command need to be retained.
  - NAR messages must be retained until you receive semi-annual revisions to the Ammunition Unserviceable, Suspended and Limited Use, TWO 24-AA-ORD-010 that have incorporated the applicable NAR messages.
- 

Continued next page

## NAR Reclassification Response

Refer to the following table when deciding on responding to a NAR reclassification.

IF	THEN
You receive a NAR that has ammunition, pyrotechnics or CAD reclassifications on item(s) in your inventory.	You will need to perform the requirements of the NAR and generate an ATR with your results using the classification code X..
OR	
A NAR is transmitted and there is no reclassification to your inventory.	There is no requirement to send an ATR unless otherwise directed to by that NAR message.

## NAR Reclassification Codes

There are numerous reclassification codes, the table below describes only the most common to Coast Guard aviation. Additional codes are covered in chapter 11 of the Small Arms Manual, COMDTINST M8370.11 (series)

Code	Condition	Description
A	Serviceable	Issuable without Qualification
B	Serviceable	Issuable with Qualification (i.e. training use only)
H	Unserviceable	Condemned
J	Suspended	In Stock (Awaiting Reclassification)

**Introduction**

ATRs may be hand written, but this method is very time consuming for you and the personnel in the Communication Center (COMCEN). Therefore this reading assignment will cover completing ATRs on the SWS III.

---

**Before You Begin**

Before you begin writing an ATR you will need the following information available:

- NALC for the subject pyrotechnics
  - Last 9 digits of the pyrotechnics stock number
  - Condition Code (CC) of the pyrotechnics
  - Beginning balance
  - Reason for the ATR (expenditure, receipt, transfer, or reclassification code)
- 

**Procedure for Completing the ATR**

Follow these steps when completing the ATR on the SWS III:

Step	Action
1.	Open a new document in Word.
2.	First you need to KEY the From/To lines as follows: <div><b>FM COGARD AIRSTA ELIZABETH CITY NC TO NAVORDCEN IMSD MECHANICBURG PA //90//</b></div>

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Continued next page

**Procedure for  
Completing the  
ATR (Continued)**

The following is a continuation of completing the ATR on the SWS III:

Step	Action
3.	<p>Next, KEY the info line to Headquarters.</p> <div> FM COGARD AIRSTA ELIZABETH CITY NC  TO NAVORDCEN IMSD MECHANICBURG PA //90//  INFO COMDT COGARD WASHINGTON DC //G-OCU-3// </div>
4.	<p>Next, KEY the letters <b>BT</b>, which signifies the beginning of the message is following.</p> <div> FM COGARD AIRSTA ELIZABETH CITY NC  TO NAVORDCEN IMSD MECHANICBURG PA //90//  INFO COMDT COGARD WASHINGTON DC //G-OCU-3//  <b>BT</b> </div>
5.	<p>Next, KEY the classification and SSIC line using the following guidelines. All air stations with the exception of Hawaii and Alaska will transmit their ATR's as UNCLASSIFIED. Alaska and Hawaii's will be CONFIDENTIAL. All ATR's will have the SSIC as N08010.</p> <div> FM COGARD AIRSTA ELIZABETH CITY NC  TO NAVORDCEN IMSD MECHANICBURG PA //90//  INFO COMDT COGARD WASHINGTON DC //G-OCU-3//  BT  <b>UNCLAS //N08010// or CONFID //N08010//</b> </div>

Continued next

page

## 6.A.04 (Continued)

## How to Complete an ATR on SWS III

### Procedure for Completing the ATR (Continued)

The following is a continuation of completing the ATR on the SWS III:

Step	Action
6.	<p>Next, <b>KEY</b> the subject line. The subject line is made up of two elements (this line is always the same for all air stations).</p> <ol style="list-style-type: none"><li>1. The reason for the message and</li><li>2. The reference</li></ol> <div><div>FM COGARD AIRSTA ELIZABETH CITY NC TO NAVORDCEN IMSD MECHANICBURG PA //90// INFO COMDT COGARD WASHINGTON DC //G-OCU-3// BT UNCLAS //NO8010// <b>SUBJ: AMMO TRANS RPT RCS SPCC 8010.12</b></div></div>
7	<p>Next, <b>KEY</b> the reference line. This will include the name of the sending unit, the Date Time Group (DTG), message classification and previous report number.</p> <div><div>FM COGARD AIRSTA ELIZABETH CITY NC TO NAVORDCEN IMSD MECHANICBURG PA //90// INFO COMDT COGARD WASHINGTON DC //G-OCU-3// BT UNCLAS //N08010// SUBJ: AMMO TRANS RPT RCS SPCC 8010.12 <b>A. USCG AIRSTA ELIZABETH CITY DTG 131745</b> <b>B. AUG 98 (U) (189)</b></div></div>

Continued next page

**Procedure for  
Completing the  
ATR (Continued)**

The following is a continuation of completing the ATR on the SWS III:

Step	Action
8.	<p>Next, KEY four backslashes (this signifies the beginning of the message reporting information) the Unit Identifier Code (UIC) which is made up of one letter and you unit OPFAC followed by a backslash"/" then the ATR number. Follow this with a backslash and the letter "Z" (code for CG) backslash, then the Julian date, backslash, then the UIC for the district you requisition from followed by three backslashes, (the three backslashes signify the end of this reporting line).</p> <pre> FM COGARD AIRSTA ELIZABETH CITY NC TO NAVORDCEN IMSD MECHANICBURG PA //90// INFO COMDT COGARD WASHINGTON DC //G-OCU-3// BT UNCLAS //N08010// SUBJ: AMMO TRANS RPT RCS SPCC 8010-12 A. USCG AIRSTA ELIZABETH CITY DTG 131745 AUG 98 (U) (189)  ////Z30205/062/Z/225/Z81105/// </pre>

Continued next page

**Procedure for  
Completing the  
ATR (Continued)**

The following is a continuation of completing the ATR on the SWS III:

Step	Action
9.a.	<p>Next, KEY the transaction line. The transaction line has up to 8 entries depending on the transaction. The following example shows the reporting of an operational expenditure of 7 MK-25 flares.</p> <div data-bbox="703 567 1421 907" style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <pre> FM COGARD AIRSTA ELIZABETH CITY NC TO NAVORDCEN IMSD MECHANICBURG PA //90// INFO COMDT COGARD WASHINGTON DC //G-OCU-3// BT UNCLAS //N08010// SUBJ: AMMO TRANS RPT RCS SPCC 8010-12 A. USCG AIRSTA ELIZABETH CITY DTG 131745 AUG 98 (U) (189) ///Z30205/062/Z/225/Z81105/// ///L554012346789/A/B115/H7/T108/// 1      2 3 4 5 </pre> </div> <p>Item 1 NALC for MK-25s plus the last 9 digits of the stock number (NIIN).</p> <p>Item 2 Condition Code (CC) Alpha</p> <p>Item 3 Beginning balance</p> <p>Item 4 Reason for the expenditure and how many were expended.</p> <p>Item 5 Total remaining on hand</p>

Continued next page

**Procedure for  
Completing the  
ATR (Continued)**

The following is a continuation of completing the ATR on the SWS III:

Step	Action
9.b	<p>The following example shows a report of receiving 30 MK-124 flares.</p> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p>FM COGARD AIRSTA ELIZABETH CITY NC  TO NAVORDCEN IMSD MECHANICBURG PA //90//  INFO COMDT COGARD WASHINGTON DC //G-OCU-3//  BT  UNCLAS //N08010//</p> <hr/> <p>SUBJ: AMMO TRANS RPT RCS SPCC 8010-12  A. USCG AIRSTA ELIZABETH CITY DTG 131745 AUG 98  (U) (189)///Z30205/062/Z/225/Z81105///  ///L554/012346789/A/B115/H7/T108///  ///L283002345676/A/B60/C30/Z096111036/T90///</p> <div style="display: flex; justify-content: space-around; width: 100%;"> <span>1</span><span>2</span><span>3</span><span>4</span><span>5</span><span>6</span> </div> </div> <p>Items 1-3 are the same as in step 9.a.  Item 4 Showing how many were received, <b>C</b> is used to indicate receipts.  Item 5 Is the requisition number, (OPFAC # followed by the document number assigned by the transferring unit).  Item 6 Total number of MK-124's on hand (B60+C30=T90).</p>

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Continued next page



**Procedure for  
Completing the  
ATR (Continued)**

The following is a continuation of completing the ATR on the SWS III:

Step	Action
9.c.	<p>The following example shows a reclassification of MK-124's flares using the lot number HB257K645 that have been reclassified to Hotel (condemned).</p> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p>FM COGARD AIRSTA ELIZABETH CITY NC  TO NAVORDCEN IMSD MECHANICBURG PA //90//  INFO COMDT COGARD WASHINGTON DC //G-OCU-3//  BT  UNCLAS //N08010//  SUBJ: AMMO TRANS RPT RCS SPCC 8010-12  A. USCG AIRSTA ELIZABETH CITY DTG 131745 AUG 98  (U) (189)  ///Z30205/062/Z/225/Z81105///  ///L554012346789/A/B115/H7/T108///  ///L283002345676/A/B60/C30/Z096111036/T90///  ///<b>L283002345676/B20/XH20/T0</b>///  1                      2    3   4   5   6</p> </div> <p>Items 1-2 Are the same as 9. a. and 9. b.</p> <p>Item 3 Is the designation (<b>X</b>) used to signify a reclassification has occurred.</p> <p>Item 4 Is the reclassified designation (Alpha to <b>H</b>otel)</p> <p>Item 5 Is the total number of MK-124's on hand effected by the reclassification.</p> <p>Item 6 Total remaining on hand in Alpha status with the same lot number.</p>

Continued next page

**Procedure for  
Completing the  
ATR (Continued)**

The following is a continuation of completing the ATR on the SWS III:

Step	Action
9.	<p>Next, KEY four backslashes (this signifies the end of the message reporting information). Then enter any pertinent remarks using the format shown below. <b>Remarks are required for a POC.</b></p> <div data-bbox="683 539 1419 1106" style="border: 1px solid black; padding: 5px;"> <p>FM COGARD AIRSTA ELIZABETH CITY NC  TO NAVORDCEN IMSD MECHANICBURG PA //90//  INFO COMDT COGARD WASHINGTON DC //G-OCU-3//  BT  UNCLAS //N08010//  SUBJ: AMMO TRANS RPT RCS SPCC 8010-12  A. USCG AIRSTA ELIZABETH CITY DTG 131745 AUG 98  (U) (189)  ///Z30205/062/Z/225/Z81105///  ///L554012346789/A/B115/H7/T108///  ///L283002345676/A/B60/C30/Z096111036/T90///  ///L283002345676/B20/XH20/T0///  ///</p> <p><b>REMARKS:</b>  <b>1. ARRANGED FOR DISPOSAL OF L283 FLARES.</b>  <b>2. POC AST1 SMITH (919) 335-1111</b></p> </div>

Continued next page

### Procedure for Completing the ATR (Continued)

The following is a continuation of completing the ATR on the SWS III:

Step	Action
10.	<p>Next, KEY the letters <b>BT</b>, which signifies the end of the</p> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <p>FM COGARD AIRSTA ELIZABETH CITY NC  TO NAVORDCEN IMSD MECHANICBURG PA //90//  INFO COMDT COGARD WASHINGTON DC //G-OCU-3//  BT  UNCLAS //N08010//  SUBJ: AMMO TRANS RPT RCS SPCC 8010-12  A. USCG AIRSTA ELIZABETH CITY DTG 131745 AUG 98  (U) (189)  ////Z30205/062/Z/225/Z81105///  ///L554012346789/A/B115/H7/T108///  ///L283002345676/A/B60/C30/Z096111036/T90///  ///L283002345676/B20/XH20/T0///  ////  REMARKS:  1. ARRANGED FOR DISPOSAL OF L283 FLARES.  2. POC AST1 SMITH (919) 335-1111  <b>BT</b></p> </div>

## Introduction

Prior to the transmission of any message from a Coast Guard unit, it must be released by the command. This reading assignment will provide the basics of ATR routing requirements, though some districts and units may have additional requirements.

## ATR Release Authorization

Once you have completed the ATR and before it is to be transmitted you need to get a release authorization. The releasing official will ensure the message is given the proper priority and security classification. Once it is released (signed copy of the ATR), the ATR is routed to the unit COMCEN for transmission.

## Routing an ATR to the COMCEN

Once you have received releasing approval, follow the steps provided below to electronically transmit the ATR to your unit COMCEN for transmission.

Step	Action
1.	Open ATR Word document.
2.	Highlight the message to be sent.
3.	Once highlighted copy message.
4.	Create a new mail message.
5.	Type the unit COMCEN address in the <i>To:</i> line, IAW unit SOP.
6.	Leave <i>Cc:</i> line empty
7.	Type <b>ATR</b> in the <i>Subject:</i> line.
8.	Paste the copy of your ATR in the body of the message.
9.	Below your ATR message type the releasing officials name and phone extension (for COMCEN information).
10.	Send your message.



**Questions**

1. What is the condition code that represents you received a shipment of pyrotechnics?
  - a. A
  - b. C
  - c. D
  - d. H
2. What is the condition code that represents pyrotechnics were expended for training purposes?
  - a. F
  - b. G
  - c. J
  - d. K
3. What are the three most common condition codes you will use?
  - a. I, J, K
  - b. A, B, C
  - c. C, H, J
  - d. C, F, H
4. When is the annual ATR inventory report required?
  - a. Prior to January 1
  - b. Not later than February 1
  - c. Not later than October 1
  - d. Annual reporting is not required
5. How long are you supposed to keep NAR messages?
  - a. Until you receive an updated TWO 24-AA-ORD-010
  - b. 30 days
  - c. 90 days
  - d. 1 year

---

Continued next page

**Questions  
(Continued)**

6. If you received a NAR on pyrotechnics in your inventory with a reclassification of "H". What do you do to your inventory, if anything?
  - a. Pull the pyrotechnics from service and use for training only.
  - b. Pull the pyrotechnics and condemn.
  - c. Nothing, the code is for informational purposes only.
  - d. Perform an operational inspection of the pyrotechnics.
7. What letter is used to report pyrotechnics have been reclassified?
  - a. U
  - b. X
  - c. Y
  - d. Z
8. What two-letter code signifying the beginning of a message is used in ATR message traffic?
  - a. BT
  - b. BZ
  - c. MZ
  - d. ZZ
9. What classification will Alaska and Hawaii use when transmitting an ATR?
  - a. Unclassified
  - b. Confidential
  - c. Secret
  - d. FYEO
10. What is the Standard Source ID Code that is always entered on the classification line of the ATR?
  - a. M80002
  - b. N80002
  - c. M08010
  - d. N08010

---

Continued next page

**Questions  
(Continued)**

11. What publication is referenced on the ATR subject line?
    - a. SPCC 8010.12
    - b. SCPP 8010.12
    - c. AMMO 8370.11
    - d. AMMO 8010.11
  12. How are the ATR's dated?
    - a. Fiscal year calendar
    - b. Month, Day, Year
    - c. Year, Month, Day
    - d. Julian
  13. What is the purpose of the four backslashes (////) in an ATR message?
    - a. Separate the transaction lines
    - b. Indicate the beginning and end of the message reporting information
    - c. Separate the reporting information from the text
    - d. None of the above
  14. What is always the first item listed on the transaction line of the ATR?
    - a. NAR code
    - b. NALC/NIIN
    - c. Amount on hand
    - d. Lot number
  15. What has to be done to an ATR before it is transmitted?
    - a. Proofread
    - b. Signed by the CO
    - c. Released
    - d. Nothing is required
-





**Answers**

Check your answers with those provided below.

Question	Answer	Reference
1.	B	Pg. 3
2.	A	Pg. 3
3.	D	Pg. 3
4.	B	Pg. 4
5.	A	Pg. 4
6.	B	Pg. 5
7.	B	Pg. 5
8.	A	Pg. 7
9.	B	Pg. 7
10.	D	Pg. 7
11.	A	Pg. 8
12.	D	Pg. 9
13.	B	Pg. 9
14.	B	Pg. 10
15	C	Pg. 15

**Performance**

SUBMIT an Ammunition Transaction Report.

---

**Introduction**

To ensure your Ammunition Transactions are reported properly. An accurate ATR needs to be submitted. This section will get you familiar with actually writing and submitting an ATR.

---

**Performance Objective 1**

Given the Small Arms Manual, COMDTINST M8370.11 (series), station SOP's and a report that pyrotechnics have been expended during a training evolution, **DETERMINE** what type of ATR needs to be submitted.

---

**Performance Objective 2**

Given a NAR that has a pyrotechnic reclassification of "H" for MK-25's at your unit, **WRITE** a transaction line indicating the change in classification as it would appear on an ATR.

---

**Performance Objective 3**

**COMPLETE** an actual ATR for your air station.

---

**Performance Objective 4**

**ROUTE** a completed ATR for transmission.

---



**Performance** DIRECT line crew operations.

---

**References**


Perform the objectives listed below IAW one or more of the following references:

- ACMS
  - Air Operations Manual, COMDTINST M3710.1(series), Chapters 1, 4, and Appendix B
  - Aeronautical Engineering Maintenance Management Manual, COMDTINST M13020.1 (series), Chapters 8, 9, 12 and Enclosures 16 and 17
  - Local station instructions (as applicable)
- 

**Performance Objective 1**

**ACQUIRE** line crew tasking from the appropriate sources.

---

**Performance Objective 2**


**PRIORITIZE** line crew tasks.

---

**Performance Objective 3**


**ASSIGN** tasks to line crew personnel as required.

---

**Performance Objective 4**


**VERIFY** line crew tasks are accomplished correctly and in a timely manner.

---

**Performance Objective 5**

**INFORM** your supervisor of line crew tasking progress.

---





**Performance** DIRECT shop maintenance.

---

**References**

Perform the objectives listed below IAW one or more of the following references:

- ACMS
  - Aeronautical Engineering Maintenance Management Manual, COMDTINST M13020.1 (series), Chapters 1, 3, 4, 7, 8, 9, 12, and Enclosure 1
  - Local station instructions (as applicable)
- 

**Performance Objective 1**

**ACQUIRE** shop maintenance tasking from the appropriate sources.

---

**Performance Objective 2**


**PRIORITIZE** shop maintenance tasks.

---

**Performance Objective 3**


**ASSIGN** tasks to shop personnel as required.

---

**Performance Objective 4**

**VERIFY** shop maintenance tasks are accomplished correctly and in a timely manner.

---

**Performance Objective 5**

**INFORM** your supervisor of shop maintenance tasking progress.

---





### Objectives

To successfully complete this assignment, you must study the references and master the following objectives:

- **STATE** characteristics of the Serviceable Tag - Materiel, DD-1574.
- **STATE** characteristics of the Unserviceable Tag - Materiel, DD-1577-2.
- **STATE** characteristics of the Unsatisfactory Report (UR) Tag - Materiel, CG-1577-A.
- **COMPLETE** statements pertaining to the Unsatisfactory Report (UR) (CG-4010).
- **COMPLETE** statements pertaining to material conditions.
- **COMPLETE** statements pertaining to the disposition of Type 1, 2, or 4 material.
- **COMPLETE** statements pertaining to the standard (reparable/unserviceable) management system.
- **LIST** the reference publications used for materiel preservation when ACMS MPC's are not applicable.

### References

The information that you must study is contained in Aeronautical Engineering Maintenance Management Manual, COMDTINST M13020.1 (series).



**Introduction**

This assignment introduces the process of the disposition of defective aircraft components.

---

**Notice to Student**

There is no informational text presented in this assignment, therefore, you must read and study the material in the references to prepare for the Self-Quiz, Pamphlet Review Quiz, and the EOCT.

In addition, the information presented in the references, your local station policy, and on-the-job experience should prepare you adequately to complete the performance objectives in the Syllabus at the end of this assignment.

---

**In This Assignment**

This assignment contains the following:

Subject	Page
How to Complete This Assignment.....	3
Disposition of Defective Aircraft Components Self-Quiz .....	4
Disposition of Defective Aircraft Components Self-Quiz Feedback.....	6
Syllabus .....	9

---

### Before You Begin

To complete this assignment, it is recommended that you do the following:

- Get permission from the reference custodian to use the documents.
- Get a current copy of the reference listed; usually from Quality Assurance.
- Ensure that no pages in the reference are missing or damaged.
- DO NOT write in the reference or remove any pages.
- Return the reference to the custodian when you have finished the lesson.

### How to Proceed

To successfully complete this assignment, follow the steps listed below:

Step	Action
1.	Read the objectives on page 1.
2.	<p>Read and study the sections of the Aeronautical Engineering Maintenance Management Manual, COMDTINST M13020.1 (series) listed below and ensure that you can fulfill each objective listed on page 1.</p> <ul style="list-style-type: none"><li>• Chapter 4 (Aircraft and Aeronautical Records and Reports), Paragraph C.1.a. through C.1.c.</li><li>• Chapter 7 (Aviation Supply Support), Paragraphs E., F., I., and J.</li></ul>
3.	Take the self-quiz and then review the feedback. If you have no trouble with the self-quiz, you should be well prepared for the Pamphlet Review Quiz and the EOCT.

**Questions**

Answer the following questions on the disposition of defective aircraft components:

1. What is the Serviceable Tag - Materiel, DD-1574 attached to?  
\_\_\_\_\_
2. Once attached, how long will the Unserviceable (Reparable) Tag - Materiel, DD-1577-2 remain with an unserviceable item?  
\_\_\_\_\_
3. What color is the Unsatisfactory Report (UR) Tag-Materiel, CG-1577-A?  
\_\_\_\_\_
4. Failures or unsatisfactory conditions of aeronautical materiel affecting SAFETY OF FLIGHT shall be reported by  
\_\_\_\_\_.
5. On all failed components assigned a UR, the UR identification tag will also be affixed to the \_\_\_\_\_ of the shipping container in a conspicuous place.
6. The term "A" Condition is also referred to  
as \_\_\_\_\_.
7. The terms "F" Condition, NON-RFI, Unserviceable, and Class 265 are used \_\_\_\_\_.

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Continued next page

**Questions**  
**(Continued)**

8. Whenever Type 1 materiel has been repaired locally and returned to serviceable status, it shall be reported by \_\_\_\_\_.
9. Unserviceable Type 2 and Type 4 reparable materiel is returned to \_\_\_\_\_ using the AMMIS generated NON-RFI turn-in document.
10. DO NOT use \_\_\_\_\_ for tagging equipment.
11. A current Configuration Report must be included with those components listed on the ACMS Configuration Report as \_\_\_\_\_.
12. List below the reference publications used for materiel preservation when such procedures are not addressed in applicable ACMS MPC's or component maintenance manuals.

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**Feedback**

Compare your answers to the feedback provided below. If you had trouble with this self-quiz, please review the appropriate section in the applicable reference.

Question	Answer	Reference
1.	serviceable equipment	COMDTINST M13020.1 (series) Chapter 4
2.	Until the item is serviceable	COMDTINST M13020.1 (series) Chapter 4
3.	Red/White/Blue	COMDTINST M13020.1 (series) Chapter 4
4.	message	COMDTINST M13020.1 (series) Chapter 4
5.	outside	COMDTINST M13020.1 (series) Chapter 4
6.	RFI	COMDTINST M13020.1 (series) Chapter 7
7.	interchangeably	COMDTINST M13020.1 (series) Chapter 7
8.	routine message	COMDTINST M13020.1 (series) Chapter 7

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Continued next page

## Disposition of Defective Aircraft Components Self-Quiz, Feedback (Continued)

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6.D.02c

### Feedback (Continued)

The following is a continuation of the self-quiz feedback:

Question	Answer	Reference
9.	ARSC	COMDTINST M13020.1 (series) Chapter 7
10.	wire	COMDTINST M13020.1 (series) Chapter 7
11.	next higher assembly	COMDTINST M13020.1 (series) Chapter 7
12.	NAVSUP PUB 502 NAVSUP PUB 503 NA 15-01-500 NA 15-02-1 (T.O. 2-1-32)	COMDTINST M13020.1 (series) Chapter 7

---



**Performance**

INSTRUCT personnel in the proper disposition of defective aircraft components.

---

**Performance  
Objective 1**

Given the applicable publications, **PREPARE** a training session on the disposition of defective aircraft components IAW one or more of the following references:

- Military Requirements for becoming a Senior Petty Officer, MRNSPO 0458 (series)
- Aeronautical Engineering Maintenance Management Manual, COMDTINST M13020.1 (series)
- ACMS (for information you may use pertaining to component preservation)

**Performance  
Objective 2**

Given the applicable publication, **PRESENT** a training session on the disposition of defective aircraft components IAW the Military Requirements for becoming a Senior Petty Officer, MRNSPO 0458 (series).







**Objectives**

To successfully complete this assignment, you must study the text and master the following objectives:

- **STATE** the manual used for aviation shop safety guidelines.
  - **IDENTIFY** the manual used in the Coast Guard to identify the proper color scheme used within the shop/industrial area.
  - **STATE** the note associated with precedence of safety manuals when there is a conflict between publication authorities.
  - **STATE** the federal organization on which the Coast Guard bases its safety regulations.
  - **STATE** the most effective safety features associated with shop equipment.
  - **STATE** the safety measures used to prevent the accumulation of potentially hazardous static charges.
  - **STATE** the inspection requirements for fire extinguishers.
  - **STATE** the appropriate inspection requirements for a given situation.
- 

**References**

The information in this assignment can be found in the following manuals:

- Safety And Environmental Health Manual, COMDTINST M5100.47 (series)
  - Inspection and Proofload Testing of Lifting Slings for Aircraft and Related Components, NAVAIR 17-1-114
  - 29 CFR 1900-1910 (series),
  - 29 CFR 1910.1000 to End (series)
  - National Fire Protection Agency (NFPA 101 & 105)
  - Aeronautical Engineering Maintenance Management Manual, COMDTINST M13020.1 (series)
  - Colors and Coatings Manual, COMDTINST M10360.3 (series)
- 

Continued next page

**Introduction**

The purpose of this assignment is to introduce you to the general inspection references required while performing a shop safety inspection. Furthermore, the intent of this course is not to establish an actual inspection guideline or checklist. This course is for familiarization and is not to be construed as policy. Prior to conducting any inspection, read your unit's Station Instructions and applicable Coast Guard safety publications.

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**In This Assignment**

This assignment contains the following:

Subject	Page
Publications and References .....	3
Safety Program Responsibilities Guidelines .....	5
Occupational Safety and Health Administration.....	6
Unique Military Operations .....	7
How to Complete This Part of the Assignment .....	8
Inspecting Work Areas, Self-Quiz.....	9
Inspecting Work Areas Self-Quiz, Feedback.....	12
Syllabus .....	15

---

**Introduction**

The number of manuals used by the Coast Guard for the safety program is mind boggling. For this reason this course will only list the most common publications and references used by all air stations.

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**Precedence of Manuals**

The following note is in regard to the authority of manuals when there is doubt of precedence or source.

**NOTE**

Published Coast Guard safety and environmental health instructions shall have precedence over all other standards regardless of their source.

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**COMDTINST  
M13020.1 (series)**

Aeronautical Engineering Maintenance Management Manual, COMDTINST M13020.1 (series), chapter 12 provides general information and establishes shop safety standards and procedures for all USCG aviation maintenance facilities.

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**COMDTINST  
M5100.47 (series)**

Safety and Environmental Health Manual, COMDTINST M5100.47 (series) sets forth the Coast Guard's safety and environmental health policy and the elements of the Coast Guard Safety and Environmental Health Program, hearing conservation program, and assigns responsibilities for the implementation of those elements. This manual also specifies the safety and environmental health standards that are to be applied within the Coast Guard.

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**COMDTINST  
M10360.3 (series)**

Colors and Coatings Manual, COMDTINST M10360.3 (series) establishes mandatory standard paint schemes for floors, walls, walkways, and dynamic color codes for industrial and shop spaces. This manual also contains information on painting safety and basic confined space entry used within the Coast Guard.

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Continued next page

**NAVAIR 17-1-114**

Inspection And Proofload Testing of Lifting Slings for Aircraft and Related Components, NAVAIR 17-1-114 provides instructions in the maintenance, inspection, and proofload testing of aircraft lifting and aircraft component slings. This manual should only be used when there are no Coast Guard directives to reference, such as, Mandatory Special Requirement Lists (MSRL).

---

**NFPA 101 & 105**

National Fire Protection Agency 101 & 105, publishes standards for fire protection and prevention in industrial areas. Such as:

- Fire wall ratings
  - Sprinkler location
  - Types of fire extinguishers required
- 

**29 CFR 1910 (series)**

The 29 Code of Federal Regulations (29 CFR) are government standards that require mandatory compliance by the Coast Guard under the provisions made by the Safety and Environmental Manual, M5100.47. The 29 CFR is provided as two separate volumes. They are as follows:

- 29 CFR Parts 1900-1910 (covers 1901-1910.999)
- 29 CFR Parts 1910 (covers 1910.999 to End)

They provide guidance in areas such as:

- Hoist inspections
  - Fire protection requirements
  - Personnel protection requirements
  - Loft stowage guidelines
  - Ladder safety guidelines
  - Ventilation/Exhaust requirements
-

<b>Introduction</b>	The Coast Guard Safety and Environmental Health Manual, COMDTINST M5100.47 (series) assigns responsibilities for the implementation and management of the safety programs for your unit.
<b>Commanding Officer</b>	The Commanding Officer is responsible for ensuring that the personnel under their cognizance are provided a safe and healthful environment. They must also ensure that their facilities and operations comply with all applicable federal laws and regulations and Coast Guard instructions and standards pertaining to the health and safety of personnel and their families.
<b>Safety Officer</b>	The executive officer at a shore unit is normally designated as the senior safety officer of the unit.
<b>Safety Supervisor</b>	A unit safety supervisor is appointed by the executive officer to assist the safety officer when they are constrained by time or duties from performing the day-to-day tasks associated with program implementation.
<b>Shop Supervisor</b>	<p>As the shop supervisor you are responsible to ensure that the personnel around you practice safe work procedures at all times by:</p> <ul style="list-style-type: none"><li>• Ensuring the crew has proper safety equipment</li><li>• Ensure that your subordinates are properly trained in Coast Guard safety policies</li><li>• Analyzing the work under your supervision to anticipate and identify potential hazards</li><li>• Use administrative controls, such as reducing the duration of exposure</li></ul>

**Introduction**

The Occupational Safety and Health Administration (OSHA) is a federal organization controlled by the Department of Labor. This organization administers and publishes regulations for the industrial work force throughout the United States. The Coast Guard uses these regulations as a guideline to establish its own policies.

---

**Inspectors  
Responsibilities**

In today's Coast Guard there is a growing number of civilian personnel working side by side with active duty personnel. It is your responsibility while you are performing shop or industrial space safety inspections to be aware of both the Coast Guard and OSHA regulations.

---

**OSHA  
Jurisdiction**

Occupational Safety and Health Administration (OSHA) *shall be* authorized to conduct announced or unannounced inspections and evaluations at Coast Guard activities where deemed necessary. OSHA is allowed to inspect workplaces which are occupied by both military and civilian which are *not* uniquely military in nature.

OSHA inspectors and evaluators are authorized to do the following:

- Enter without delay, during regular work hours, any building, installation, facility, construction site, or other area, work place, or environment where work is performed by Coast Guard employees or contract employees.
  - Inspect and investigate, during regular working hours, all pertinent conditions, structures, machines, appropriate devices, equipment, and materials.
  - Question privately, any employee, supervisor, and/or facility official in charge.
- 

**OSHA Inspection  
Limitations**

OSHA, even though a federal agency, has its jurisdictional limitations when it comes to the military.

**NOTE**

OSHA is not authorized to inspect workplaces or operations which are uniquely military.

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Continued next page

### Introduction

Due to the nature of military operation and the risk involved with those operations the military has the option to set their own safety standards.

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### Definition of Uniquely Military

The definition of uniquely military is defined as any workplace which is solely occupied by military personnel or secured for reasons of national security.

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### Example Of Uniquely Military Operations

Examples of uniquely military operations include but are not limited to:

- Search and Rescue operations
  - Military aircraft operations
  - Operations of Coast Guard Cutters
-



**Before You Begin**

To complete this part of the assignment, you should do the following:

- Get a current copy of the Aeronautical Engineering Maintenance Management Manual, COMDTINST M13020.1 (series), usually from the Quality Assurance office
  - Ensure that no pages in the reference are missing or damaged
  - Ensure that the correct updates are incorporated
  - DO NOT write in the reference or remove any pages
  - Return the reference to the custodian when you have finished the lesson
- 

**How to Proceed**

To successfully complete this assignment, follow the steps listed below:

Step	Action
1	Read the objectives on page 1 of lesson 6.D.03c
2	Read and study the material in the Aeronautical Engineering Maintenance Management Manual, COMDTINST M13020.1 (series) chapter 12, Aviation Maintenance Safety and ensure that you can fulfill the applicable objectives.
3	Take the self-quiz
4	Review the feedback  <b>NOTE</b>  If you have no trouble with the self-quiz, you should be well prepared for the Pamphlet Review Quiz and the EOCT.

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Continued next page

**Questions**

Answer the following questions on inspecting work areas:

1. What manual provides general information and establishes shop safety standards and procedures for aviation maintenance facilities?

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2. What manual would you use to determine the painting scheme for a first-aid station located on a hanger deck?

- A. Aeronautical Engineering Maintenance Management Manual, COMDTINST M13020.1 (series)
- B. Colors and Coatings Manual, COMDTINST M10360.3 (series)
- C. CFR 1910 (series)
- D. Safety and Environmental Health Manual, COMDTINST M5100.17 (series)

3. If there is a conflict between the Coast Guard and OSHA, the note regarding the precedence of safety manuals states that:

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4. On which federal organization does the Coast Guard base its safety regulations?

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5. The most effective features for preventing unsafe operations and injuries on powered machinery is improved machine design, and \_\_\_\_\_.

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Continued next page

**Questions  
(Continued)**

6. Any equipment or machinery showing signs of misuse, mechanical deterioration, or damage that could result in failure or possible injury will be \_\_\_\_\_.  
\_\_\_\_\_.
7. Lighting in the immediate area of shop equipment must be \_\_\_\_\_.
8. While a machine is in operation, guards shall not be \_\_\_\_\_.
9. When inspecting a shop equipped with a grinder, you should ensure that a \_\_\_\_\_ is available for the operator.
10. Hand tools that have mushroomed heads, defective handles, or worn parts which make them unsafe shall be \_\_\_\_\_.
11. To prevent the accumulation of static charges, flammable solvent containers must be \_\_\_\_\_ and \_\_\_\_\_.
12. In a shop where oily wastes are generated, the waste must be disposed of in a \_\_\_\_\_.
13. Visual inspections of fire extinguishers shall be made \_\_\_\_\_.  
\_\_\_\_\_.



**Feedback**

Compare your answers to the feedback provided below. If you had trouble with the Self-Quiz, please review the appropriate section of this reading assignment.

Question	Answers	Reference
1.	Aeronautical Engineering Maintenance Management Manual, COMDTINST M13020.1 (series)	3
2.	B	3
3.	Published Coast Guard safety and environmental health instructions shall have precedence over all other standards regardless of their source	3
4.	Occupational Safety and Health Administration (OSHA)	6
5.	installation of protective mechanical guards	M13020.1 (series) Chapter 12
6.	removed from service for repairs	M13020.1 (series) Chapter 12
7.	adequate to eliminate glare or shadows	M13020.1 (series) Chapter 12
8.	removed	M13020.1 (series) Chapter 12
9.	protective face shield	M13020.1 (series) Chapter 12

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Continued next page

**Feedback  
(Continued)**

This is a continuation of the feedback table on the preceding page.

<b>Question</b>	<b>Answer</b>	<b>Reference</b>
10.	removed from service	M13020.1 (series) Chapter 12
11.	electrically grounded and bonded	M13020.1 (series) Chapter 12
12.	self-closing air-tight metal can	M13020.1 (series) Chapter 12
13.	monthly	M13020.1 (series) Chapter 12



<b>Performance</b>	INSPECT shop work areas, tools, and aviation equipment for safety compliance.
<b>References</b>	<p>The following is a list of references that can be used to research the applicable safety information prior to conducting an inspection on the applicable equipment or shop work area.</p> <ul style="list-style-type: none"><li>• Safety And Environmental Health Manual, COMDTINST M5100.47 (series)</li><li>• Inspection and Proofload Testing of Lifting Slings for Aircraft and Related Components, NAVAIR 17-1-114</li><li>• 29 CFR 1900-1910 (series), &amp; 29 CFR 1910.1000 to End (series) (normally located in the Facilities Engineering office)</li><li>• National Fire Protection Agency manual (NFPA 101 &amp; 105) (normally located in the Facilities Engineering office)</li><li>• Aeronautical Engineering Maintenance Management Manual, COMDTINST M13020.1 (series)</li><li>• Colors and Coatings Manual, COMDTINST M10360.3 (series)</li><li>• Local station instructions</li></ul>
<b>Performance Objective 1</b>	<p>Given a work area/tools/aviation equipment, <b>RESEARCH</b> the applicable safety regulations IAW one or more of the above publications.</p> <p>_____ </p>
<b>Performance Objective 2</b>	<p>Given a shop work area, <b>INSPECT</b> the work area to ensure safety compliance IAW the applicable publications.</p> <p>_____ </p>
<b>Performance Objective 3</b>	<p>Given AMT tools and aviation equipment, <b>INSPECT</b> the tools and aviation equipment IAW the applicable publications.</p> <p>_____ </p>





**Performance** COORDINATE calibration and repair of special tools and measuring equipment.

---

**References** Perform the objectives listed below IAW one or more of the following references:

- Aeronautical Engineering Maintenance Management Manual, COMDTINST M13020.1 (series), Chapter 9
- TMDE Calibration Notes, Maintenance Data Collection Codes, AFTO 33K-1-100-1
- Local station instructions (as applicable)

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**Performance Objective 1** IDENTIFY special tools or measuring equipment-requiring calibration.



**Performance Objective 2** DETERMINE the source for calibration of special tools or measuring equipment.



**Performance Objective 3** STATE the routing procedures at your unit for special tools and measuring equipment requiring calibration.



**Performance Objective 4** STATE the procedures at your unit for scheduling, and tracking the status of special tools and measuring equipment requiring calibration.





## Objectives

To successfully complete this assignment, you must study the text and master the following objectives:

## (Pyrotechnic Handling Objectives)

- **IDENTIFY** Commanding Officers responsibilities concerning pyrotechnic handling, storage, and security.
- **IDENTIFY** Weapons Petty Officers responsibilities concerning pyrotechnic handling, storage, and security.
- **IDENTIFY** handling safety training requirements for personnel assigned to explosives/ammunition (pyrotechnic) operations.
- **LIST** a minimum of five personnel handling restrictions involved in pyrotechnic handling operations.
- **IDENTIFY** the proper methods for handling pyrotechnic.
- **SELECT** the correct procedures for fighting a pyrotechnic fire.
- **IDENTIFY** toxic hazards associated with pyrotechnics.
- **STATE** in writing explosive/ammunition mishap category's for a given category definition.
- **LIST** the two types of reports required to satisfy the Coast Guard and Navy explosive/ammunition mishap reporting requirements.
- **IDENTIFY** what manual covers reporting criteria concerning safety mishaps.
- **IDENTIFY** the reporting time requirement for ammunition, mishaps, explosive (major) incident, malfunction, or dangerously defective items.
- **IDENTIFY** when a Immediate Report is required.
- **STATE** in writing the message versus letter reporting criteria.
- **IDENTIFY** the proper procedures taken upon notification of a unexploded ordnance discovery report.
- **STATE** in writing who is authorized to recover MK-58 and MK-25 Marine Smoke Floats.
- **IDENTIFY** the proper procedures taken for recovering MK-58 and MK-25 Marine Smoke Floats.

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Continued next page

## 6.D.01 **Pyrotechnic Handling, Stowage, and Security (Continued)**

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### **(Pyrotechnic Storage Objectives)**

- **IDENTIFY** basic concepts of explosives/ammunition storage principles.
- **IDENTIFY** types of explosives/ammunition storage facilities from a given description scenario.
- **IDENTIFY** explosives/ammunition storage design and placement requirements.
- **IDENTIFY** required explosives/ammunition identification signs for pyrotechnic storage facilities.
- **IDENTIFY** proper stowage methods for explosives/ammunition.
- **LIST** a minimum of three times when a Magazine Material Safety Inspection will be performed.
- **IDENTIFY** proper corrective action for Magazine Material Safety Inspection discrepancies.
- **STATE** in writing where Magazine Material Safety Inspection documentation is made.
- **LIST** the three types of Ammunition Stock Records.

### **(Pyrotechnic Security Objectives)**

- **IDENTIFY** who establishes policy and procedures and assigns responsibility for the security of small arms and explosives/ammunition.
- **IDENTIFY** how often a unit Physical Security Plan shall be reviewed.
- **IDENTIFY** areas covered in a Physical Security Plan.
- **STATE** in writing the security designation of a Physical Security Plan.
- **LIST** a minimum of three requirements for personnel access to explosives/ammunition storage areas.
- **IDENTIFY** what manual covers Key Control Program requirements.
- **LIST** when Explosives/Ammunition Inventories will be conducted.

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Continued next page

**(Pyrotechnic  
Security  
Objectives  
(Continued)**

- **STATE** in writing where Explosives/ Ammunition Inventory documentation is made.
  - **IDENTIFY** proper procedures for performing a monthly explosives/ammunition inventory.
  - **IDENTIFY** proper procedures for performing a annual explosives/ ammunition inventory.
  - **LIST** the five mandatory Ordnance and Magazine log entries.
  - **STATE** in writing the manual that covers procedures for reporting missing, lost, or stolen explosives/ammunition.
- 

**Reference**

The information in this assignment can be found in the following manuals.

- Small Arms Manual, COMDTINST M8370.11 (series)
- Safety and Environmental Health Manual, COMDTINST M5100.47 (series)
- Pyrotechnic Screening, Marking and Countermeasure Devices Manual, SW050-AB-MMA-010
- Toxic Hazards Associated With Pyrotechnics Items, SW050-AC-ORD-010
- Pyrotechnics, Screening and Marking Devices, NAVAIR 11-15-7
- Ammunition Ashore, Handling, Stowing and Shipping Manual, NAVSEA OP-5 (Vol. 1)
- Conventional Ammunition Integrated Management System (CAIMA), SPCCINST 8010.12 (series)
- Coast Guard Physical Security Program, COMDTINST M5530.1 (series)
- United States Navy Ordnance Safety Precautions, NAVSEA OP 3347 (series)

**Introduction**

Pyrotechnic ammunition, which is not dangerous when properly maintained, consists of fireworks adapted to service needs. To perform your duties as an AST1, you will be required to direct the handling, storage, and security of your units pyrotechnics.

**NOTE**

When you see the term Explosives/Ammunition in this assignment and in the applicable publications, pyrotechnics is included in the phrase.

**How to Proceed**

This assignment has been broken into three sections (Handling, Storage, and Security). To complete the objectives of each section, reading assignments have been provided. After finishing each section's reading assignment, complete the Self-Quiz provided for that section before moving on to the next section.

**In This Assignment**

This assignment contains the following:

Subject	Page
Pyrotechnics Handling Overview.....	5
Pyrotechnics Storage Overview .....	27
Ordnance Security Overview .....	48
Syllabus .....	64

**Introduction**

To perform your duties as an AST1 you will be required to direct the handling of your units pyrotechnics.

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**How to Proceed**

After finishing all of the reading assignments of this section, complete the Pyrotechnic Handling Self-Quiz. After completing the, Pyrotechnic Handling Self-Quiz, continue on to the Pyrotechnic Storage section of this assignment.

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**In This Assignment**

This assignment contains the following:

Subject	Page
Pyrotechnic Handling, Stowage, and Security Responsibilities .....	6
Pyrotechnics Handling.....	9
Pyrotechnic Fire Hazards and Fire Fighting Procedures.....	11
Pyrotechnic Toxic Hazards.....	13
Explosive/Ammunition Ordnance Mishaps .....	14
Types of Explosive/Ammunition Reports .....	15
Discovery and Reporting Unexploded Ordnance Procedures .....	16
Recovery of MK-58 and MK-25 Marine Location Markers .....	18
MK-58 and MK-25 In Water Recovery Procedures.....	19
MK-58 and MK-25 Beach Recovery Procedures.....	20
Pyrotechnics Handling Self-Quiz .....	21
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## **6.D.01 Pyrotechnic Handling, Stowage, and Security Responsibilities**

### **Rationale**

For safety, security, and accountability specific responsibilities dealing with weapons and munitions are assigned to different individuals. At Coast Guard air stations these individuals are the Commanding Officer and the Weapons Petty Officer. Since air stations normally only have pyrotechnics, the following responsibilities have been adjusted to reflect this fact.

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### **Responsibilities of Commanding Officer's**

Unit commanding officers shall ensure the following:

- Proper surveillance, accounting, expenditure, and safety requirements of all pyrotechnics are in strict compliance with Small Arms Manual, COMDTINST M8370.11 (series), and applicable Area and/or District policies and instructions.
  - Physical security requirements for storage of the unit's pyrotechnics are IAW Coast Guard Physical Security Program COMDTINST M5530.1 (series).
  - The unit's officers and crew receive training on pyrotechnics safety requirements.
  - Stringent precautions are taken against accidents.
  - That all applicable Naval Ammunition Report's (NARs) are reviewed within 72 hours of receipt, and ensure all pyrotechnics are reported as required.
  - Required logs and records are maintained and required reports are submitted in a timely manner.
  - Any pyrotechnic malfunction or incident is reported within 24 hours per District OPLAN and Conventional Ammunition Integrated Management System (CAIMA) SPCCINST 8010.12 (series).
  - Pyrotechnics are expended only in authorized circumstances.
  - No pyrotechnic or components thereof are given away or diverted for private use.
  - Pyrotechnics are only used in prescribed devices and manners for the particular item.
- 

Continued next page

## Pyrotechnic Handling, Stowage, and Security Responsibilities (Continued)

### Weapon Petty Officers Responsibilities

All units without an assigned Gunner's Mate shall have a Weapons Petty Officer designated in writing by the commanding officer. The petty officer must be a E-5 or above. Where applicable, the following duties outlined below apply to Weapon Petty Officers.

If task is about...	then...
publications	Ensure that ordnance publications required by Ordnance Publications Index, COMDTINST M8000.3 (series) are onboard, current and are made readily available to all personnel.
logs records and reports	Determine which logs, records and reports are required by the Small Arms Manual, COMDTINST M8370.11 (series) chapter 5 Ensure that they are on hand and are being properly maintained.
access to magazine keys	Have on file a current letter designating who shall have access to the magazine keys, the conditions under which magazines are to be opened, and the security that must be afforded magazine keys.
directives	Ensure compliance with directives applicable to the weapons department and maintain a file of those directives.
department accountability	Inventory the department's accountable and sensitive property and ensure records are accurate and complete.
department instructions	Provide departmental instructions that include all precautions to be taken to prevent loss of government owned pyrotechnics.

Continued next page

## 6.D.01

### Pyrotechnic Handling, Stowage, and Security Responsibilities (Continued)

#### **Weapon Petty Officers Responsibilities (Continued)**

The following is a continuation of the Weapon Petty Officers duties:

<b>If task is about...</b>	<b>then...</b>
safety orders	Ensure appropriate safety orders are posted and they:  (1) are adequate as to content; (2) contain the proper procedures for the handling of misfires and hangfires; (3) are posted in conspicuous places; and (4) have been thoroughly explained to the appropriate personnel.
training programs	Examine unit training program to ensure that:  (1) personnel are properly instructed and trained to handle personnel and material casualties;  (2) the general efficiency of the crew during Stan Checks indicates sufficient time is being spent on training and drills;  (3) steps have been taken to correct mistakes noted during previous training exercises; and  (4) all ammunition handling parties have been trained sufficiently in safety precautions.
weekly checks	Inspect all logs and records weekly and after major events, e.g., wet drills, etc., to ensure compliance with Small Arms Manual, COMDTINST M8370.11 (series) chapter 5.
material conditions	The Weapon Petty Officer is responsible for the material condition of all ordnance equipment and spaces. Each piece of ordnance equipment and all ordnance spaces should be inspected at least weekly by the Weapon Petty Officer to determine the material condition.

**Introduction**

Pyrotechnic handling shall be kept to a minimum to reduce the chance of accidents and damage to the pyrotechnics. This reading assignment covers handling safety training, personnel restrictions, and methods of handling pyrotechnics.

---

**Regulations on Handling Safety Training**

Individuals assigned to any operation involving explosives/ammunition ordnance or ordnance equipment shall be thoroughly trained to perform that work in a safe and expeditious manner. They shall receive complete and frequent indoctrination in:

- Ordnance or ordnance equipment characteristics.
  - General and specific safety precautions applicable to the ordnance or ordnance equipment to be used.
  - Response to any occurrence that may involve personnel injury, including the hazards associated with explosion.
  - Reporting any safety violations or other abnormal conditions. This shall include the reporting of any items that have been dropped or that show signs of extreme rough handling.
- 

**Personnel Handling Restrictions**

Pyrotechnics are composed of sensitive elements such as fuses, friction composition, and primers. The following personnel handling restrictions will be observed:

- Persons working with explosives shall be limited to the minimum number required to properly perform the operation.
  - At least two persons shall be required for reasons of safety and security.
  - Unauthorized or unnecessary personnel shall not be permitted to loiter or congregate in the vicinity of any operation involving ordnance or ordnance equipment.
  - “Horseplay/skylarking” of any kind shall not be permitted during ordnance operations, i.e., no running, playing, or practical joking in ammunition handling or storage areas shall be permitted.
  - Disassembly of pyrotechnics is prohibited.
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Continued next page

**Personnel  
Handling  
Restrictions  
(Continued)**

The following is a continuation of personnel handling restrictions.

- Boxes should not be dropped or thrown.
  - Protective or safety devices should not be removed until just before use.
  - Discard signals with cracked bodies or and other visual defect which might render them unserviceable.
  - Do not smoke, or carry lighted cigars, cigarettes, or pipes in the vicinity of pyrotechnics.
  - Do not carry naked lights, matches, or other spark-producing materials in or near storage of, or while handling or using, pyrotechnics.
- 

**Methods of  
Handling  
Pyrotechnics**

You should follow these guidelines when handling pyrotechnics:

- Pyrotechnic containers shall not be tumbled, thrown, dragged or dropped on each other or on the deck.
  - Barrels, drums, or containers filled with any pyrotechnics shall never be rolled, but hand carried or transported on trucks or handcarts.
  - Care shall be taken not to obliterate or deface markings, labels, or identification tags on pyrotechnics containers. Inspectors shall check to see that the markings are intact.
  - When handling pyrotechnics, do not point either end directly toward personnel.
  - Pyrotechnics should be handled with care and protected against shock.
-

## Introduction

There are several fire hazards associated with pyrotechnics. Basic information on fire hazards and fire fighting procedures is provided in this reading assignment, specific pyrotechnic details may be found in the Ammunition Ashore, Handling, Stowing and Shipping Manual, NAVSEA OP-5 (Vol. 1).

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## Fire Hazards

Fires involving pyrotechnics are extremely hazardous, not only for the great risk of explosion, but also for the great difficulty in bringing such fires under control.

### **WARNING**

Do not use solid streams of water, vaporizing liquid, foam, dry chemicals, or carbon-type extinguishers in and attempt to extinguish a pyrotechnic fire.

Water will cause the spontaneous ignition of most pyrotechnic materials. Pyrotechnic compositions characteristically contain their own oxidants and therefore do not depend on atmospheric oxygen for combustion. For this reason, the exclusion of air by whatever means, is usually ineffective. Many pyrotechnic mixtures, particularly illumination flare mixtures, burn with intense heat (up to 4500° F). **Fire prevention in ordnance operations is of the utmost importance.**

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## 6.D.01

### Pyrotechnic Fire Hazards and Fire Fighting Procedures (Continued)

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#### Fire Fighting Procedures

Fighting a pyrotechnic fire is dangerous and shall only be performed by trained personnel. The following are procedures for fighting a pyrotechnic fire.

Step	Action
1.	Sound the alarm.
2.	Secure adjacent buildings, magazines and evacuate personnel if necessary.
3	Notify area Explosive Ordnance Detail.

---

**Introduction**

There are several pyrotechnic toxic hazards associated with pyrotechnics. Basic information is provided in this reading assignment, specific pyrotechnic details may be found in the Pyrotechnic Screening, Marking and Countermeasure Devices, SW050-AB-MMA-010 and Toxic Hazards Associated With Pyrotechnics Items, SW050-AC-ORD-010.

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**Pyrotechnic  
Toxic Hazards**

Many chemicals used in pyrotechnic devices are poisonous if taken internally. This also applies to the residues of burned pyrotechnics. The information provided below covers the basic toxic hazards of pyrotechnics used in Coast Guard aviation:

Type of Pyrotechnic	Toxic Hazard
MK-124 and MK-80 Signal Flares	<ul style="list-style-type: none"><li>• Mildly irritating to eyes and nasal passages when encountered in relatively light concentrations outdoors, heavy.</li><li>• Concentrations in closely confined spaces are dangerous and may be lethal if for no other reason than that they reduced the amount of available oxygen in the air.</li></ul>
MK-25 and MK-58 Marine Location Markers	<p>These markers contain red phosphorus, which burns to produce</p> <ul style="list-style-type: none"><li>• High temperature flame.</li><li>• Abundant smoke that is highly caustic to moist tissues of the nose and throat.</li><li>• Combustion of red phosphorus pyrotechnic devices produce deposits of white phosphorus.</li><li>• White phosphorus is highly toxic as well as spontaneously ignitable in air (when it dries and is disturbed).</li><li>• Breathing the smoke or fumes shall be avoided.</li></ul>

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## 6.D.01 Mishaps

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## Types of Explosive/Ammunition Ordnance

### Introduction

The potential for a explosive/ammunition (pyrotechnics) mishap is always present. The need for timely reporting and evaluation of an mishap is critical. This reading assignment explains what constitutes a mishap and the requirements for reporting an ordnance mishap.

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### Explosive/ Ammunition (Pyrotechnics) Mishap Categories

Explosive/ammunition mishaps fall into five different types of categories, the following are definitions of each of those categories:

- **Ammunition Details:** Accessories used in packing, handling, protecting, or surveillance of explosive/ammunition, such as boxes.
  - **Dangerously Defective:** Explosive/ammunition ordnance that, on visual examination or local test is found to be capable of causing an accident or malfunction.
  - **Major (Explosion) Incident:** An occurrence which creates a potentially hazardous situation. Incidents include, but are lot limited to, the following:
    - Human errors involved in assembly, disposal, handling, loading, processing, storing, testing, transporting or use of explosives.
    - Unusual or unexpected occurrences, unnatural phenomena, unfavorable environments or instances of equipment failure which may damage or affect safety and reliability of explosives.
    - Loss or abandonment of explosives that may result in a potential hazard to untrained personnel who may find the item.
    - Misuse or unauthorized alteration of explosive ordnance.
    - Discovery of expended marine location markers.
  - **Major (Explosion) Mishap:** An accidental explosion or fire causing damage to personnel or property involving explosive ordnance or explosive material.
  - **Malfunction:** The term applied to an explosive/ammunition ordnance item that fails to function in the manner for which it was designed.
-

<b>What to Report</b>	Explosive/ammunition ordnance mishaps need to be reported and investigated in the same manner as other mishaps, regardless of other USCG or USN reporting requirements. Two reports (Safety aspect and Ammunition aspect) shall be required to satisfy USCG and USN reporting requirements.
<b>Safety Aspect Report</b>	To cover safety considerations, mishaps shall be reported by Safety Aspect Report using the following criteria and example provided in the Safety and Environmental Health Manual, COMDTINST M5100.47 (series) based on the personnel or property loss that has occurred.
<b>Ammunition Aspect Report</b>	For ammunition considerations, mishaps, explosive (major) incident, malfunction, or dangerously defective items shall be reported by Ammunition Aspect Report message within 24 hours to the units cognizant District IAW that District's policy and the District will report per Conventional Ammunition Integrated Management System (CAIMA) SPCCINST 8010.12 (series), chapter 3, Attachment A and B.
<b>Immediate Report</b>	An immediate report is required for mishaps or incidents that involves a fatality or injury. Amplifying information, when it becomes available, should be submitted by supplemental message or rapid draft letter.
<b>Message Verses Letter Criteria</b>	Criteria for message versus letter are the degree of hazard or potential hazard requiring dissemination and distribution to other activities to prevent recurrence.
<b>Collecting Evidence</b>	Since explosive mishaps and major malfunctions are usually characterized by the destruction or loss of the offending item of ordnance, the difficulty in positive determination of causes is magnified. All fragments and remains of the item should be collected for examination and tests. Photographs of damage to equipment and the area of occurrence, if practicable, is desired.

## **6.D.01      Discovery and Reporting Unexploded Ordnance Procedures**

---

### **Introduction**

With the increase of people moving into new areas and heading to the beach, the potential for finding unexploded ordnance also increases. Whenever this happen, it is most often the Coast Guard who is called to respond. This reading assignment covers what to do after receiving a an unexploded ordnance report.

---

### **Definition of Explosive Ordnance**

Explosive ordnance is defined as, bombs and warheads, guided, and ballistic missiles, artillery, mortar, rocket and small arms ammunition, all mines, torpedoes, and depth charges, grenades, demolition charges, pyrotechnics, electro-explosive devices, cartridge actuated devices (CADs), propellant actuated devices, clandestine and improvised explosive devices, and all similar or related items or components explosive in nature. This definition includes all ammunition containing explosive, propellants, nuclear fission or fusion materials and CBR agents.

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### **Definition of Unexploded Ordnance**

Unexploded ordnance is which has been primed, fused, armed, or otherwise prepared for action, and which has been fired, dropped, launched, projected, or placed in such a manner as to constitute a hazard to friendly operations, installations, personnel, or material and remains unexploded whether through malfunction of design or for any other cause.

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### **Definition of Discovery**

The suspected, detected or reported presence of unexploded or damaged explosive ordnance constitutes a hazard to friendly operations, installations, and material and to the civilian population. These items shall be reported to the nearest Explosive Ordnance Detail Unit (EOD) immediately.

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Continued next page

## Discovery and Reporting Unexploded Ordnance Procedures (Continued)

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### Reporting Procedures

Upon locating or receiving a report of items identified or suspected of being unexploded ordnance, they shall be reported as follows:

#### NOTE

Be prepared to provide the following information:  
Specific location. Any or all markings and color of item. Complete description of item, i.e., size, shape, protrusions, etc. Action taken to isolate them.

Step	Action
1.	Contact local EOD Unit by telephone. District Commander (r) shall maintain a list of EOD Units within their boundaries.
2.	Contact local and state police by telephone.
3.	Evacuate the area around the unexploded ordnance item.
4.	Post a guard until EOD or civil assistance arrives and takes charge.
5.	Contact the cognizant District for instructions for submission of and ordnance incident report message.

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## 6.D.01 Recovery of MK-58 and MK-25 Marine Location Markers

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### Introduction

The danger in a civilian finding and handling a Marine Location Markers is that Marine Location Markers use phosphorous. Dry phosphorous ignites when exposed to air. Wet phosphorous is relatively safe. Thus, when expended markers which did not completely burn or have “ash” caked over unburned phosphorous are recovered and allowed to dry out and/or handling dislodges the caked coat over the phosphorous, they will re-ignite.

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### Coast Guard Policy

Removing hazardous floating debris is standard Coast Guard policy. Thus, all markers found afloat with the possibility of washing ashore are retrieved. This precludes the markers being found by civilians and handled thereby preventing incidents of injury and/or property damage.

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### Authorized Recovery Personnel

Only personnel having received training in the recovery of MK-58 and MK-25 Marine Smoke Floats may effect a recovery operation.

#### **WARNING**

Aircrew members shall not request small boat crews to recover MK-25's or MK-58's if they have not been properly trained in the correct recovery procedures. Additional, recovered MK-25's or MK-58's shall not be transported in any aircraft or enclosed boat or vehicle.

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### Marine Location Marker Recovery Training

Training in the recovery of Marine Location Marker shall be performed IAW the Pyrotechnic Screening, Marking and Countermeasure Devices Manual, SW050-AB-MMA-010 and Toxic Hazards Associated With Pyrotechnics Items, SW050-AC-ORD-010, in the use and hazards of pyrotechnics. All AST's shall be trained in the recovery of MK-58 and MK-25 Marine Smoke Floats.

---

**Introduction**

Though MK-58 and MK-25 Marine Location Markers are designed to sink after they are expended, this does not happen on occasion. Therefore procedures have been developed for their recovery if it becomes necessary.

**Procedures for Recovering a Marine Location Marker In Water**

Marine Location Markers found floating in water shall be recovered using the following procedures:

Step	Action
1.	Fill a fireproof container, e.g., trash can, with water.
2.	<div><b>WARNING</b> Due to the risk of possible re-ignition, and especially if the marker appears to be a misfire, the marker should be gripped at the bottom. The end of the marker with the nose valve shall be pointed away from you and other personnel or equipment.</div> <p>Handling it as little as possible, retrieve the marker and deposit in the fireproof container and keep it immersed.</p>
3.	Contact the nearest EOD unit for final disposition.
4.	The marker shall be kept immersed in water in the container outside and away from normally occupied areas until the EOD provides disposal instructions and/or recovers the marker.
5.	Mark container "Danger, do not handle, contains , phosphorous, flammable, may cause serious burns".

**Introduction**

Though MK-58 and MK-25 Marine Location Markers are designed to sink after they are expended, on occasion they may end up on a beach. Therefore procedures have been developed for their recovery, if it becomes necessary.

**Marine Location Marker On a Beach Recovery**

Marine Location Markers found on a beach shall be recovered using the following procedures:

Step	Action
1.	Post a guard to keep personnel away. <div><b>WARNING</b> Dry phosphorous ignites when exposed to air. When markers which did not completely burn or have “ash” caked over unburned phosphorous are recovered and allowed to dry out and/or handling dislodges the caked coat over the phosphorous, they will re-ignite.</div>
2.	Inform the local police and notify the nearest EOD unit.
3.	EOD unit will provide disposal instructions and/or recover the marker.

**Questions**

1. The commanding officer shall ensure any pyrotechnic malfunction or incident is reported within \_\_\_\_ hours.
  - a. 6
  - b. 12
  - c. 24
  - d. 30
2. How often shall the Weapons Petty Officer inspect logs and records to ensure compliance with Small Arms Manual, COMDTINST M8370.11 (series) chapter 5?
  - a. Daily
  - b. Weekly
  - c. Monthly
  - d. Quarterly
3. Personnel involved in explosives/ ammunition operations shall be trained in \_\_\_\_\_.
  - a. responding to personnel injuries
  - b. responding to terrorist attacks
  - c. performing inventories
  - d. reporting missing, lost, or stolen explosives/ ammunition
4. List five restrictions personnel must follow when handling pyrotechnics.
  - a. \_\_\_\_\_  
\_\_\_\_\_
  - b. \_\_\_\_\_  
\_\_\_\_\_
  - c. \_\_\_\_\_  
\_\_\_\_\_
  - d. \_\_\_\_\_  
\_\_\_\_\_
  - e. \_\_\_\_\_  
\_\_\_\_\_

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Continued next page



**Questions  
(Continued)**

5. How are barrels, drums, or containers filled with pyrotechnics transported?
  - a. By rolling them
  - b. By truck
  - c. By handcart
  - d. Both b and c
6. What is the first step taken in fighting a pyrotechnic fire?
  - a. Protect adjacent buildings and magazines.
  - b. Notify area Explosive Ordnance Detail.
  - c. Sound the alarm.
  - d. Don self-contained breathing apparatus.
7. What highly toxic material is produced from a burning MK-58?
  - a. Soda ash
  - b. White phosphorous
  - c. Red phosphorous
  - d. Saline gas
8. What are the five categories of explosive/ammunition mishaps?
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_
  - c. \_\_\_\_\_
  - d. \_\_\_\_\_
  - e. \_\_\_\_\_
9. List the two types of reports required to satisfy the Coast Guard and Navy explosive/ammunition mishap reporting requirements.
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_
10. What manual do you refer to for safety mishap reporting criteria?
  - a. NAVSEA OP 3347 (series)
  - b. COMDTINST M8370.11 (series)
  - c. COMDTINST M5100.47 (series)
  - d. NAVAIR 11-15-7

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Continued next page

**Questions  
(Continued)**

11. Ammunition mishaps, explosive (major) incident, malfunction, or dangerously defective items shall be reported by message within \_\_\_\_\_ hours to the units cognizant District
- a. 4
  - b. 8
  - c. 12
  - d. 24
12. An Immediate Report is required when a mishap or incident involves a \_\_\_\_\_.
- a. injury
  - b. loss of equipment
  - c. fatality
  - d. both a and c
13. An explosive/ammunition mishap message verses a letter depends on \_\_\_\_\_
14. What is the first step taken for an unexploded ordnance notification report?
- a. Contact your district armory
  - b. Contact local EOD
  - c. Post a guard
  - d. Evacuate a two block area
15. Who is authorized to recover MK-58 and MK-25 Marine Smoke Floats?
16. An expended MK-58 Marine Smoke Float recovered from the ocean, is to be placed in a fireproof container filled with \_\_\_\_\_.
- a. sand
  - b. PKP
  - c. soda ash
  - d. water



**Feedback**

Compare your answers to the feedback provided below. If you had trouble with this self-quiz, please review the appropriate section of this assignment.

Question	Answer	Ref.
1.	c	Pg. 6
2.	b	Pg. 8
3.	a	Pg. 9
4.	<p>Any five of the below items are correct:</p> <ul style="list-style-type: none"><li>• Persons working with explosives shall be limited to the smallest number required to properly perform the operation.</li><li>• At least two persons shall be required for reasons of safety and security.</li><li>• Unauthorized or unnecessary personnel shall not be permitted to loiter or congregate in the vicinity of any operation involving ordnance or ordnance equipment.</li><li>• “Horseplay/skylarking” of any kind shall not be permitted during ordnance operations, i.e., no running, playing, or practical joking in ammunition handling or storage areas shall be permitted.</li><li>• Disassembly of pyrotechnics is prohibited</li><li>• Boxes should not be dropped or thrown.</li><li>• Protective or safety devices should not be removed until just before use.</li><li>• Discard signals with cracked bodies or and other visual defect which might render them unserviceable.</li><li>• Do not smoke, or carry lighted cigars, cigarettes, or pipes in the vicinity of pyrotechnics.</li><li>• Do not carry naked lights, matches, or other spark-producing materials in or near storage of, or while handling or using, pyrotechnics.</li></ul>	Pg. 9-10

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Continued next page

**Feedback  
(Continued)**

The following is a continuation of the self-quiz feedback:

Question	Answer	Reference
5.	d	Pg. 10
6.	c	Pg. 11
7.	b	Pg. 13
8.	a. Ammunition Details b. Dangerously Defective c. Major (Explosion) Incident d. Major (Explosion) Mishap e. Malfunction	Pg. 14
9.	a. Safety aspect b. Ammunition aspect	Pg. 15
10.	c	Pg. 15
11.	d	Pg. 15
12.	d	Pg. 15
13.	the degree of hazard or potential hazard requiring dissemination and distribution to other activities to prevent recurrence.	Pg. 15
14.	b	Pg. 17
15.	Only personnel having received training in the recovery of MK-58 and MK-25 Marine Smoke Floats may effect a recovery operation.	Pg. 18
16.	d	Pg. 19

**Introduction**

To perform your duties as an AST1 you will be required to direct the storage, of your units pyrotechnics. You must be thoroughly familiar with the applicable publications that provide the requirements for this task. You have no authority to waive or alter Coast Guard and station safety regulations nor shall you permit violation of these regulations by others. You shall act positively to eliminate any potential hazards that exist.

---

**How to Proceed**

After finishing all of the reading assignments of this section, complete the Pyrotechnic Storage Self-Quiz. After completing the Pyrotechnic Storage Self-Quiz, continue on to the Ordnance Security section of this assignment.

---

**In This Assignment**

This assignment contains the following:

Subject	Page
Principles of Explosive/Ammunition Storage .....	28
Types of Storage Facilities.....	29
Explosive/Ammunition Storage Design and Placement.....	30
Types of Storage Identification Signs .....	33
Regulations Governing Methods of Stowage.....	36
Magazine Material Safety Inspections .....	39
Types of Ammunition Stock Records .....	42
Pyrotechnics Storage Self-Quiz.....	43
Pyrotechnics Storage Self-Quiz Feedback.....	46

---

**Introduction**

To assist in the prevention of explosives/ammunition mishaps, the DOD and Coast Guard mandates compliance for explosives/ammunition storage using the following explosives/ammunition storage principles.

---

**Storage Principles**

The following principles shall be observed in storing explosives/ammunition.

- The highest degree of safety in explosives/ammunition storage could be assured if each item or division were stored separately. However, this ideal storage generally is not feasible. A proper balance of safety and other factors frequently requires mixing of several types of explosives/ammunition in storage.
  - Ammunition and explosives may not be stored together with dissimilar materials or items that present positive hazards to the munitions. Examples are mixed storage of explosives/ammunition with flammable or combustible materials, acids, or corrosives.
  - Different types of explosives/ammunition designated by item and division may be mixed in storage provided they are compatible. Ammunition and explosives are assigned to a storage compatibility group (SCG) when they can be stored together without increasing significantly either the probability of an accident, or for a given quantity, the magnitude of the effects of an accident.
  - Subject to application of these standards, particularly in reference to compatibility as defined within the Ammunition Ashore, Handling, Stowing and Shipping Manual, NAVSEA OP-5 (Vol. 1), explosives/ammunition may be mixed in storage when mixing will facilitate safe operations and promote overall storage efficiency. Assignment of items to SCG's that require separate storage shall be minimized as consistent with actual hazards presented and not based on administrative considerations or end use.
-

**Introduction**

It is not practical to describe all types of magazines in this manual. Therefore, only most common types found at Coast Guard air stations are described. More complete descriptions, details, and information on magazine designs may be obtained from your Area Command (LANT Area or PAC Area).

**Common Types of Storage Facilities**

Listed below are the common types of explosives/ammunition storage facilities found at or near Coast Guard air stations. Some units may have access to only one or two types. Normally only units near DOD or Coast Guard district armories may have access to Earth-Covered Magazines.

Type of Storage	Description	When used	Placement
Earth-Covered Magazine	Reinforced concrete, arch-type, earth-covered magazines commonly referred to as a "Bunker".	When storage of large quantities of explosives/ammunition.	Remote area
Ready Service Magazine	Above ground, cinder block or concrete construction.	When shore units require certain types of pyrotechnics to be stored in a ready service condition in order to reduce the response time.	Convenient location
Ready Service Locker	Approved water-proof steel box type construction with the access cover secured with individually operated drop bolts (commonly called dogs).	When storing small quantities of certain pyrotechnics, and similar material that present fire, but no blast, hazard.	May be located in a hanger or near the survival shop on the basis of operational necessity.



## **6.D.01 Explosive/Ammunition Storage Design and Placement**

---

### **Introduction**

The need to build, move, or modify a magazine is not as simple as picking a spot or a piece of equipment and building, moving, or modifying. Specific requirements and considerations must be met prior to commencement of the work.

---

### **Magazine Construction Features and Location**

Magazine construction features and location are important safety considerations in planning explosives/ammunition facilities or facilities that are exposed to the damaging effects of potential explosions. The effects of potential explosions may be reduced significantly by construction features that offer the following:

- limit the amount of explosives involved
- reduce the intensity of blast over-pressure or thermal radiation
- lower the quantity and range of hazardous fragments and debris

Proper location of exposed sites reduces the risk of unacceptable damage and injuries in event of an incident.

---

### **Explosive Safety Site Approval**

Commanding officers of shore activities at which the explosives/ammunition are handled or stored will request explosive safety site approval assistance from your cognizant Area Command (LANT Area or PAC Area), for new construction or modification of existing structures that involve explosives quantity-distance requirements.

---

### **Magazine Siting Considerations**

Magazines are sited at distances from each other so that communication of explosion or fire from one to another is unlikely to occur. Actual siting requirements are influenced both by the construction features of the magazines and the types and quantities of explosives/ammunition they contain. Standard earth-covered magazines have proven capabilities for preventing explosion communication for all types of explosives/ammunition. Nonstandard earth-covered magazines are weaker structurally and thus have lesser capabilities for preventing explosion communication. Requests for siting of ready service lockers and magazines shall be made through your cognizant Area Command (LANT Area or PAC Area).

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Continued next page

## Explosive/Ammunition Storage Design and Placement (Continued)

---

### Magazine Separation

Magazines must be separated from other magazines and buildings by the quantity-distance requirements listed in Ammunition Ashore, Handling, Stowing and Shipping Manual, NAVSEA OP-5 (Vol. 1) chapter 7 to prevent the propagation of fires or explosions throughout an area in case of fire or explosion in one part of the area.

---

### Magazine Isolation

Magazines must be sufficiently distant from inhabited buildings, flight lines, highways and navigable waters so that the dangers and risks involved in storing explosives/ammunition are confined primarily to the magazine area. The Ammunition Ashore, Handling, Stowing and Shipping Manual, NAVSEA OP-5 (Vol. 1) provides quantity-distance tables in chapter 7 that contain complete data on distance requirements between magazines and inhabited buildings and public traffic routes.

---

### Magazine Lighting and Other Electrical Service Requirements

If provided, permanent lighting and its installation and other approved electrical equipment in magazines, shall conform to the National Electrical Code, NFPA 70, for hazardous locations. Lighting fixtures shall be protected against physical damage by a suitable guard or by location. An approved type of disconnect switch shall be located outside and immediately adjacent to the magazine. Suitable lightning and grounding protection shall be provided for the electrical services.

---

### Requirements for Magazine Doors

All doors to magazines must be constructed of steel and must be made to fit tightly to seal the opening against sparks, dust, dirt, rain, rodents, and the direct rays of the sun. All metal doors shall be connected to the secondary grounding system. Magazine doors and door hinges shall conform to the requirements provided in the Coast Guard Physical Security Program COMDTINST M5530.1 (series)

---

### Requirements for Magazine Floors

Magazine floors shall be of adequate strength to support the required load. They should be nonabsorbent and should be waterproof to prevent seepage of water or moisture from the ground underneath. Floors shall be sloped to provide adequate drainage and shall not have dips or low spots that permit the accumulation of water.

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Continued next page

## 6.D.01

### Explosive/Ammunition Storage Design and Placement (Continued)

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#### Requirements for Magazine Ventilators

Each magazine shall be provided with ventilators well baffled and screened to keep out sparks and fire. Additionally ventilators shall meet the following criteria.

- All ventilators must be inspected frequently and kept in good working order.
  - Flappers with fusible links are no longer required on magazines. Flappers on existing magazines must be secured with a fusible link (with a limit of 160/165 °F) in compliance with Underwriters' Laboratory or Factory Mutual Systems approval and be kept free of corrosion.
  - If the flappers do not meet the above requirements, they must be secured in an open position or completely removed.
  - All metal ventilators shall be bonded to the secondary grounding system.
  - A grid or other suitable device shall be installed immediately below the ventilator to prevent access to the magazine by removal of the ventilator.
-

### Introduction

For security reasons, magazines and lockers are not to be identified as to what is stored in them. Though magazines are required to have signs that identify restricted access, safety, and Class/Division fire and chemical hazard signs posted.

---

### Guidelines for Posting of Identification Signs

The signs or signs that represent the most hazardous material present shall be posted outside hazardous materials storage sites and operating buildings as follows:

- A posted sign should be situated so it is visible during daylight from a distance of at least 500 feet.
  - If visibility is obstructed by vegetation, curves in roads, etc., the sign shall be placed on the roadway at a distance of at least 500 feet.
  - One sign posted on or near the door end of a bunker-type magazine, or on the headwall of a box-type (concrete block construction) magazine, is normally adequate
  - When all material within a storage area is covered by one fire sign, it may be posted at the entry control point or on the access roadway.
  - When different classes or divisions of explosives are stored in individual multi-cubicle bays or module cells, they may be further identified by posting the proper signs on each bay or cell.
  - Placement of signs shall be coordinated with the station/local fire department.
  - Backing material for signs should be in the shape of the sign decal and should be constructed of noncombustible material.
- 

### Magazine “Empty” Signs

“Empty” signs shall be posted on a magazine whose contents have been removed.

---

### “Restricted Area” Signs

“Restricted Area” signs shall be posted on all storage magazines.

---

Continued next page

**Fire Division and Chemical Hazard Sign**

Identification of a particular fire division and chemical hazard is made by a corresponding sign. These signs are colored orange. The color of fire division identification number is black. This color scheme corresponds to that used by the North Atlantic Treaty Organization (NATO), the United Nations Organization (UNO), and the International Maritime Organization (IMO) to label class 1 explosives.

**Pyrotechnic Fire Division and Chemical Hazard Sign**

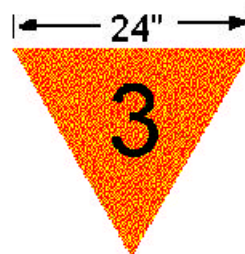
The pyrotechnic fire division and chemical hazard sign is shown below:

Class/Division Designator

Type of Hazard

1.3

Mass fire, minor blast or fragment

**Apply No Water Sign**

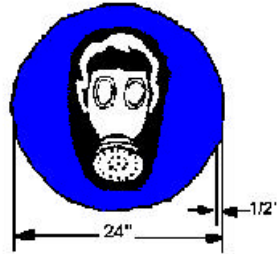
Magazines that contain pyrotechnic that are water-activated should be posted to indicate water should not be applied as a fire extinguishing agent. The "Apply No Water" sign is intended for use with hazardous materials when the use of water may intensify or spread the fire or increase the hazard of an explosion. The chemical hazard sign prohibiting the use of water in fire fighting may be placed together with any of the other signs if required. The "Apply No Water" sign is shown below.



Continued next page

**Wear Breathing Apparatus Sign**

The “Wear Breathing Apparatus” sign indicates the presence of incendiary and readily flammable chemical agents that present an intense radiant heat hazard. Protective masks shall be used to prevent inhalation of smoke from burning incendiary mixtures. The “Wear Breathing Apparatus” sign is shown below.

**Guidelines for Procuring Signs**

Identification signs may be procurement through the normal Navy stock system. Stock numbers for these signs may be found in chapter 4 of the Ammunition Ashore, Handling, Stowing and Shipping Manual, NAVSEA OP-5 (Vol. 1).

**Introduction**

Methods for stowing explosives/ammunition in a magazine shall be in accordance with the following regulations.

---

**Guidelines for Determining Magazine Storage**

The type and amount of material that may be stored in any magazine are dependent upon the following:

- Quantity-Distance (Q-D) requirements described in the Ammunition Ashore, Handling, Stowing and Shipping Manual, NAVSEA OP-5 (Vol. 1) chapter 7.
  - The storage compatibility requirements.
  - When an emergency necessitates the storing of explosive/ammunition temporarily in a building not specifically constructed as a magazine, the building should in all respects provide adequate protection for the explosive/ammunition.
  - It has good protection against moisture and dampness, and has the means for adequate ventilation.
  - Meets approved lightning protection, and electrical requirements.
  - Security requirements are met based on the contents of the magazines.
- 

**Guidelines for Storage Area Aisles**

When stowing explosives/ammunition in a magazine, aisles must be created in the following manner.

- Aisles shall be kept unobstructed so that units in a pile can be inspected, inventoried, and removed as necessary.
  - Aisles approximately 18 inches wide shall be provided so that the individual containers are accessible for inspection.
  - All magazines shall be loaded leaving sufficiently wide access aisles to permit unhindered movement of materials handling equipment with the minimum necessary shifting of material to reach the desired stores.
  - A front wall clearance of two feet shall be maintained.
  - A space of at least six inches shall be maintained from stacks to the side and rear walls and to the ceiling of the magazine.
- 

Continued next page

**Guidelines for  
Storage Area  
Aisles  
(Continued)**

The following is a continuation of explosives/ammunition storage area aisles guidelines.

- The bottom layer of the store shall be raised off the floor by suitable metal dunnage to provide a ventilation space between the bottom of the stack and the floor and to protect the material in the stack from water and dampness.
  - There shall be no obstacle to the free circulation of air.
- 

**Piling/Stacking  
Requirements**

The primary requirement when piling/stacking explosives/ammunition is to maintain an orderly arrangement of stable stacks that will facilitate safe and effective handling and storage of explosives/ammunition.

---

**Guidelines for  
Piling/Stacking  
Explosives/  
Ammunition**

Use the following guidelines when piling/stacking explosives/ammunition.

- Explosives/ammunition shall be stored in their approved containers and stacked in stable piles within magazines in such a manner as to ensure against toppling or collapse of the explosives/ammunition containers.
  - The height of the stacks shall be limited by the weight which the bottom pallet or container can safely support.
  - The bottom layer should be raised off the floor by suitable metal dunnage to provide a ventilating space between the bottom of the stack and the floor and to protect the material in the stack from water and dampness.
  - The dunnage should be level, and if necessary, shims or wedges should be used.
  - Wooden pallets are acceptable dunnage when they are received as a part of the packaged unit.
  - Piles shall be arranged so that the individual containers are accessible for inspection and offer no obstacle to the free circulation of air.
- 

Continued next page



## 6.D.01 Regulations Governing Methods of Stowage (Continued)

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### **Guidelines for Piling/Stacking Explosives/Ammunition (Continued)**

The following is a continuation of explosives/ammunition piling/stacking guidelines.

- Metal dunnage and shoring shall be used to effectively secure the piles.
  - Ammunition of the same lot number should be stored in the same magazine, preferably in adjacent stacks. If a lot number is discovered to be defective, it can be quickly located and prevented from being issued.
- 

### **Guidelines for Marking Partially Filled Boxes**

Partly filled boxes shall be marked plainly to indicate that they are only partially filled. They then shall be closed securely and placed conspicuously on top of the proper stacks within appropriate height limitations.

---

### **Priority for Issuing Pyrotechnics**

Pyrotechnics shall be issued in this order:

- First, pyrotechnics that have been stored the longest or under the least favorable storage.
  - Then for pyrotechnic lots of equal age, the lowest lot number shall be issued first.
- 

### **Guidelines for Issuing Pyrotechnics for Life Raft Stowage**

Pyrotechnics that is placed into life rafts shall be issued in the following manner:

- Pyrotechnics put into life rafts shall be condition code “A” and the newest lot on hand.
  - Each type of pyrotechnics, e.g., MK-79’s, MK-124’s shall have the same lot number.
-

### Introduction

In this assignment the criteria for Magazine Material Safety Inspection will be covered.

---

### Guidelines for Performing a Magazine Material Safety Inspection

A Magazine Material Safety Inspection shall be performed using the following guidelines:

- A Magazine Material Safety Inspection shall be performed every day as assigned.
  - Weapon Petty Officer (normally the Survival shop ASTC) shall perform a Magazine Material Safety Inspection at least once a week. A full Pyrotechnic Visual Inspection may be required based on results of that inspection.
  - As needed due to events such as flooding, lighting strikes, extended periods of high temperatures and/or high humidity, sprinkler system discharge.
  - During the Annual Pyrotechnic Inventory.
- 

Continued next page

**Checklist of  
Inspection items  
for Magazine  
Material Safety**

The following is a checklist of items to check for when performing a Magazine Material Safety Inspection.

Check For:		Findings
1.	Signs of attempted or forced entry.	
2.	Presence of water in the magazine.	
3.	Special fire extinguishing agents and equipment, if required, should be examined to ensure that they are readily available and serviceable.	
4.	All fire extinguishing and fire fighting equipment should be checked that they have been regularly inspected and properly maintained in accordance with approved standard procedures.	
5.	Obstructions that interfere with the use of fire fighting apparatus.	
6.	Dangerous accumulations of rubbish, waste paper, boxes, shavings, or residues of highly combustible materials.	
7.	Improper storage of explosives/ammunition, and other hazardous materials.	
8.	Evidence of violations of smoking regulations or the use or possession of matches, cigarette lighters, or other prohibited articles.	
9.	Uncontrolled vegetation growth around operating buildings and magazines.	

Continued next page

**Guidelines for  
Correcting  
Discrepancies**

General discrepancy corrective actions are as follows:

- Discrepancies noted during a Magazine Material Safety Inspection shall be corrected immediately.
  - Segregate pyrotechnics that have been exposed to moisture until they are proven serviceable.
  - Place any loose pyrotechnics in a storage container.
  - Noted discrepancies to the ventilation and electric systems, and water leakage in the storage area shall be repaired immediately.
  - Any abnormal or unusual conditions will be brought to the Survival shop chiefs and OODs attention. Additional guidance may be requested from the District Armory.
  - Clear any uncontrolled vegetation growth from the area.
- 

**Magazine  
Material Safety  
Inspection  
Documentation**

Completion of Magazine Material Safety Inspections shall be documented in the Magazine Log or the magazine section of the Ordnance Log.

---

**Guidelines for  
Making Log  
Entries**

Log entries shall be maintained to document all deficiencies and corrective actions taken. Mandatory log entries include:

- the date of inspection
- inspection Standard Operating Procedures (SOP) used
- deficiencies detected, and deficiencies corrected

All entries shall be signed. If no deficiencies are found during the inspection, the entry "No deficiencies" shall be made.

---

**Introduction** For ammunition accountability requirements, all units receiving, holding, or expending ammunition shall complete and maintain Ammunition Stock Records.

---

**Types of Ammunition Stock Records** The three types of Ammunition Stock Records used by the Coast Guard are listed below.

Type of Stock Record	Description	Used for...
Ammunition Transaction Reports	Message format	<ul style="list-style-type: none"> <li>reporting receipts and transactions.</li> <li>a back-up reference to the NAVSUP Form 1296.</li> </ul>
Ammunition Master Stock Records Card NAVSUP Form 1296	Yellow file card	<ul style="list-style-type: none"> <li>recording inventories of all ammunition on-hand.</li> <li>recording all pertinent data for each DOD Identification Code (DODIC), or Naval Ammunition Logistic Code (NALC) and NIIN items carried.</li> </ul>
Ammunition Lot/Location Card NAVSUP Form 1297  <b>NOTE</b> Each lot numbered item will have it's own card.	Green file card	<ul style="list-style-type: none"> <li>recording the lot number of all ammunition on-hand.</li> <li>identifying the location of all ammunition on-hand.</li> </ul>

---

**Filling Out NAVSUP Forms 1296 and 1297** Procedures for filling out NAVSUP Forms 1296 and 1297 are provided in the Small Arms Manual, COMDTINST M8370.11 (series).

---

**Questions**

1. The highest degree of safety in explosives/ammunition storage could be assured if each item or \_\_\_\_\_ were stored separately.
  - a. class
  - b. division
  - c. type
  - d. unit
2. What manual provides explosives/ammunition Storage Compatibility Group information?
  - a. NAVAIR 11-15-7
  - b. SW050-AB-MMA-010
  - c. COMDTINST M8370.11 (series)
  - d. NAVSEA OP-5 (Vol. 1)
3. A storage area where pyrotechnics can be stored in a ready service condition in order to reduce the response time is called a \_\_\_\_\_.
  - a. bunker
  - b. ready service locker
  - c. ready service magazine
  - d. butler storage
4. Requests for siting a ready service locker shall be made through your cognizant \_\_\_\_\_.
  - a. group command
  - b. district command
  - c. area command
  - d. Navy district
5. Permanent lighting and its installation and other approved electrical equipment in magazines, shall conform to the \_\_\_\_\_ for hazardous locations.
  - a. National Electrical Code, NFPA 70
  - b. National Electrical Code, NFPA 90
  - c. National Explosive Storage Code, NFPA 70
  - d. National Explosive Storage Code, NFPA 90

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Continued next page

**Questions  
(Continued)**

6. To prevent seepage of water or moisture from the ground underneath, magazine floors should be made waterproof and \_\_\_\_\_.
  - a. Crack-resistant
  - b. Lined with plastic
  - c. Corrugated
  - d. Nonabsorbent
7. What is the background color of a pyrotechnic fire division and chemical hazard sign?
  - a. Red
  - b. Orange
  - c. Yellow
  - d. Blue
8. What is the Division Designator number on a pyrotechnic fire division and chemical hazard sign?
  - a. 1
  - b. 2
  - c. 3
  - d. 4
9. To allow individual containers to be accessible for inspection, aisles should be approximately \_\_\_\_\_ inches wide.
  - a. 12
  - b. 18
  - c. 24
  - d. 30
10. Defective pyrotechnics can be quickly identified if they are stored by \_\_\_\_\_.
  - a. Lot number
  - b. Stock number
  - c. LCD number
  - d. manufacture date

---

Continued next page

**Questions  
(Continued)**

11. List at least three times when a Magazine Material Safety Inspection will be performed.
- a. \_\_\_\_\_
  - b. \_\_\_\_\_
  - c. \_\_\_\_\_
12. Electrical discrepancies found during a Magazine Material Safety Inspection are required to be corrected \_\_\_\_\_.
- a. within one week
  - b. within one month
  - c. within one quarter
  - d. immediately
13. Completion of Magazine Material Safety Inspections shall be documented in \_\_\_\_\_.
- \_\_\_\_\_
14. List the three types of Ammunition Stock Records.
- a. \_\_\_\_\_
  - b. \_\_\_\_\_
  - c. \_\_\_\_\_
- \_\_\_\_\_



**Feedback**

Compare your answers to the feedback provided below. If you had trouble with this self-quiz, please review the appropriate section of this assignment.

Question	Answer	Reference
1.	b	Pg. 28
2.	d	Pg. 28
3.	c	Pg. 29
4.	c	Pg. 30
5.	a	Pg. 31
6.	d	Pg. 31
7.	b	Pg. 34
8.	c	Pg. 34
9.	b	Pg. 36
10.	a	Pg. 38
11.	<p>Any three of the below items are correct:</p> <ul style="list-style-type: none"> <li>• A Magazine Material Safety Inspection shall be performed every day an assigned or the duty AST.</li> <li>• The Weapon Petty Officer shall perform a Magazine Material Safety Inspection at least once a week. A full Pyrotechnic Visual Inspection may be required based on results of that inspection.</li> <li>• As needed due to events such as flooding, lighting strikes, extended periods of high temperatures and/or high humidity, sprinkler system discharge.</li> <li>• During the Annual Pyrotechnic Inventory</li> </ul>	Pg. 39

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Continued next page

**Feedback  
(Continued)**

The following is a continuation of the self-quiz feedback:

Question	Answer	Reference
12.	d	Pg. 41
13.	the Magazine Log or the magazine section of the Ordnance Log.	Pg. 41
14.	a. Ammunition Transaction Reports (ATR's)  b. Ammunition Master Stock Records Card NAVSUP Form 1296  c. Ammunition Lot/Location Card NAVSUP Form 1297	Pg. 42

**Introduction**

This assignment covers the uniform policies and standards for physical security protection of sensitive conventional explosives/ammunition during their life cycle. To perform your duties as an AST1 you will be required to direct the ordnance security program for the explosives/ammunition maintained at your unit.

---

**How to Proceed**

After finishing all of the reading assignments of this section, complete the Ordnance Security Self Quiz.

---

**In This Assignment**

This assignment contains the following:

Subject	Page
Physical Security Program.....	49
Physical Security Plans.....	50
Personnel Access to Explosives/Ammunition Storage.....	51
Policy for Additional Storage Security Measures .....	52
Time Periods for Explosives/Ammunition Inventories.....	53
Lost and Recovery Reports for Explosives/Ammunition.....	56
Ordnance Security Self-Quiz.....	59
Ordnance Security Self-Quiz Feedback.....	62

---

**Introduction**

This assignment covers the basics of the Coast Guard physical security program for explosives/ammunition. In several areas you will be referred to the Coast Guard Physical Security Program COMDTINST M5530.1 (series) for information pertaining to a specific procedure.

**NOTE**

All references to the Physical Security Manual in this assignment will mean the Coast Guard Physical Security Program COMDTINST M5530.1 (series).

---

**Physical Security Objectives**

Physical security objectives are to assure the use of cost effective, current state-of-the-art security protection hardware, devices, equipment and systems which can serve as countermeasures to constantly changing attack techniques, tools, methods and/or targeting trends employed by terrorist, saboteurs or criminal elements.

---

**Policy and Procedure Establishing Authority**

Commandant (G-OIS) establishes policy and procedures and assigns responsibility for the security of small arms and explosives/ammunition. If information in the Small Arms Manual is contradictory to the Physical Security Manual, you should report the discrepancy to Commandant (G-OCU/G-OIS) via the chain of command for resolution.

---

**Introduction**

The best deterrent against the loss or theft of explosives/ammunition is a good Physical Security Plan that is tailored to a specific unit.

---

**Physical Security Plan Documentation and Review**

Commanding officers responsible for explosives/ammunition security shall issue directives that cover all phases of explosives/ammunition security. Such plans shall be reviewed at least annually for currency and compliance with the Physical Security Manual. This plan shall include but not limited to the following:

- Control Measures:
  - Personnel access
  - Identification and control
- Material Control:
  - Incoming
  - Outgoing
  - Vehicle control
  - Vehicle registration
- Aids to Security:
  - Protective barriers
  - Protective lighting
  - Intrusion detection systems
  - Communications
- Security Forces.
- Coordinating Instructions.

Specifics for each of the above listed major categories can be found in the Physical Security Manual.

Additionally, the plan must also recognize the need for actions to counter potential thefts by employees. Such actions include the following:

- Screening personnel for reliability
  - Monitoring inventory
  - Accountability and disposal of explosives/ammunition
- 

**Physical Security Plan Information Designation**

A units Physical Security Plan information shall be designated as “FOR OFFICIAL USE ONLY” (FOUO).

---

**Introduction**

Not everyone at a unit needs to have access to explosives/ammunition storage areas. All personnel authorized access must also meet several requirements prior to being authorizing access.

---

**Requirements to Access Explosives/Ammunition Storage**

It is the command's responsibility to ensure all explosives/ammunition is protected from loss or theft. Also, the command must ensure that:

- Only personnel that are essential for the completion of required operations will be authorized access.
  - Personnel responsible for the security and/or custody (unaccompanied access) of explosives/ammunition are of sound character and morally responsible.
  - Individuals authorized unaccompanied access shall be designated in writing by the commanding officer.
  - Individuals granted access shall have a favorable National Agency Check IAW the Physical Security Manual.
-

**Introduction**

Additional Security measures are or may be required depending on your units explosive/ammunition allowance. Since most of this information is designated as “FOR OFFICIAL USE ONLY” (FOUO), this assignment section will only refer you the location of the information (you will not be tested on that particular information on the EOCT).

---

**Designation of Restricted Areas**

Explosive/ammunition storage areas shall be designated as a “Restricted Area” in accordance with the Physical Security Manual. Survival shops and RFI spare survival vest/life rafts do not require “Restricted Area” designations.

---

**Key Control Program**

A Key Control Program shall be established in accordance with the Physical Security Manual COMDINST M5530.1.

---

**Regulations for Aids to Security Program**

Aids to Security Program shall be established depending on the units explosive/ammunition allowance, in accordance with the Small Arms Manual, COMDTINST M8370.11 (series) and Physical Security Manual.

---

### Introduction

The purpose of a explosives/ammunition inventory is for accountability of all explosives/ammunition issued to a unit. It also serves as a deterrent from employee theft, and identifying unit operational and training needs.

---

### Policy on When Inventories are Conducted

Explosives/ammunition inventories shall be conducted at the following times.

- Daily
- Monthly
- Annually
- Whenever actual or suspected unauthorized access to storage facilities has occurred.

#### NOTE

Magazine Material Inspections will be performed in conjunction with explosives/ammunition inventories.

---

### Regulations for Daily Inventory

The Daily Inventory is to determine (by touch) that the recorded quantities of the unit's explosives/ammunition are accounted for (i.e., 20 MK-58's on record, and 20 MK-58's accounted for). The results of this count shall be entered in the ordnance or magazine log and reported to the Weapons Petty Officer or OOD in accordance with your unit's SOP.

#### NOTE

Sealed explosives/ammunition containers, showing no sign of forced entry, may be visually inspected and counted as a total unit, (i.e., sealed containers marked 2 each MK-58's may be counted as 2 MK-58's).

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Continued next page



## **6.D.01 Time Periods for Explosives/Ammunition Inventories (Continued)**

### **Regulations for Monthly Inventory**

Monthly inventories of explosives/ammunition are mandatory. This inventory shall be performed as follows:

- Minimum timeline for inventory:
  - As close to the first day of the month
  - Intervals between inventories shall be not less than 23 nor more than 35 calendar days
- All pyrotechnics shall be counted including ones placed in aircraft, survival vest, life raft, etc. (pyrotechnics in life rafts required to be visually inspected during raft calendar inspections)
- Two persons shall conduct inventories.
- An explosives/ammunition inventory count comparison of both the NAVSUP Form 1296 (master quantity) and 1297 (lot number) must be accomplished.

The results of the inventory shall be entered in the ordnance or magazine log and reported to the Weapons Petty Officer or OOD in accordance with your unit's SOP.

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### **Regulations for Annual Inventory**

An annual physical inventory of all explosives/ammunition assets shall be conducted and reported by ATR in accordance with District OPLAN's. Any discrepancy between the previous ATR and actual on-hand inventory results shall be explained on a separate message to Commandant (G-OCU) with copies to the appropriate Area Commander.

The results of the inventory shall be entered in the ordnance or magazine log and reported to the Weapons Petty Officer or OOD in accordance with your unit's SOP.

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Continued next page

## **Time Periods for Explosives/Ammunition Inventories (Continued) 6.D.01**

### **Guidelines for Ordnance and Magazine Log Entries**

Logs shall be maintained to document all material safety deficiencies and corrective actions taken and record of inventory completion. Mandatory log entries shall include the following:

- Date of inspection/inventory
  - Inspection SOP used
  - Deficiencies detected, and deficiencies corrected
  - Results of inventories
  - All entries shall be signed (no initials)
-

## **6.D.01                      Lost and Recovery Reports for Explosives/Ammunition**

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<b>Introduction</b>	The loss of explosives/ammunition must be reported immediately so that recovery may be effected as quickly as possible and the incident may be investigated. Reporting recovery immediately is equally important so as to de-alert those units and agencies involved in the recovery effort.
<b>Reporting Requirements</b>	Reporting requirements apply to all government and privately owned explosives/ammunition stored on Coast Guard facilities.
<b>Units Preliminary Missing, Lost, or Stolen Assessment</b>	The action the accountable unit takes will vary based on whether the explosives/ammunition are missing, lost, or stolen. The unit shall take a preliminary look at the circumstances to determine if the item(s) are missing, lost, or stolen.
<b>Definition of Missing</b>	In all cases, the item(s) will be shown as missing unless they can be categorized as lost or stole. Missing means that you don't know where the item(s) are.
<b>An Example of "Missing" Item</b>	When returning MK-124's to storage after Annual Wet Drill training, you notice you have only 9 MK-124's prior to loading the van at the beach you know there had been 11.
<b>Definition of Lost</b>	Lost indicates that you know where "the loss" took place and either you are in the process of attempting recovery or the determination has been made that the item(s) are not recoverable (whether or not a recovery attempt has been made).
<b>An Example of "Lost" Item</b>	A helicopter is salvaged from a ditching and the MK-25's were not in the wreckage.
<b>Definition of Stolen</b>	The determination of stolen should only be made if there are circumstances or some reasonable indication that this is the case.
<b>An Example of "Stolen" Item</b>	A HU-25 had an AST seven day inspection performed the morning it was sent on an air show static display. Prior to departing the air show the Dropmaster noticed there were no MK-124's in three of the survival vests.

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Continued next page

**Lost and Recovery Reports for Explosives/Ammunition (Continued)**

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**Reporting  
Missing, Lost, or  
Stolen Items**

After completing the preliminary investigation, determine if the item(s) are missing, lost, or stolen. A report must be filed. Detailed procedures on reporting the missing, lost, or stolen explosives/ammunition may be found in the Small Arms Manual, COMDTINST M8370.11 (series).

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**Reporting  
Recovery of  
Missing, Lost, or  
Stolen Items**

After reporting missing, lost, or stolen, explosives/ammunition item(s) and the item(s) have been recovered a recovery report must be filed. A report of recovery shall also be made if a determination is made that there never was a loss, i.e. improper documentation, miscounting, etc. Detailed procedures on reporting recovery of missing, lost, or stolen explosives/ammunition may be found in the Small Arms Manual, COMDTINST M8370.11 (series).

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**Questions**

1. Who is responsible for establishing policy and procedures and assigns responsibility for the security of small arms and explosives/ammunition?
  - a. Commandant (G-OCU)
  - b. Commandant (G-OIS)
  - c. District (r)
  - d. Navy SPCC
2. Unit Physical Security Plans shall be reviewed \_\_\_\_\_ for currency and compliance with the Physical Security Manual.
  - a. monthly
  - b. quarterly
  - c. annually
  - d. bi-annually
3. What additional major categories besides Control Measures, Aids to Security, and Material Controls are part of the Physical Security Plan?
  - a. Security Forces
  - b. Coordinating Instructions
  - c. Personnel Access
  - d. a and b are correct
4. The security designation given to a units Physical Security Plan information is \_\_\_\_\_.
5. List three of the requirement for personnel access to explosives/ammunition storage areas.
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_
  - c. \_\_\_\_\_

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Continued next page

**Questions  
(Continued)**

6. You have been tasked with setting up a Key Control Program for explosives/ammunition storage areas. What manual would you look in for program requirements?
- a. COMDTINST M8370.11 (series)
  - b. NAVSEA OP-5 (Vol. 1)
  - c. COMDTINST M5530.1 (series)
  - d. COMDTINST M5000.1 (series)
7. List when Explosives/Ammunition Inventories will be conducted.
- a. \_\_\_\_\_
  - b. \_\_\_\_\_
  - c. \_\_\_\_\_
  - d. \_\_\_\_\_
8. Where do you document the results of an Explosives/  
Ammunition Inventory? \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
9. Intervals between monthly inventories shall be not less than 23  
nor more than \_\_\_\_\_ calendar days.
- a. 32
  - b. 35
  - c. 38
  - d. 40
10. How are discrepancy between the previous ATR and actual on-  
hand inventory results explained to Commandant (G-OCU) and the  
your Area Commander?
- a. By message
  - b. By rapid-draft
  - c. By letter
  - d. By phone

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Continued next page

**Questions  
(Continued)**

11. List the five mandatory Ordnance and Magazine log entries.

- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_
- d. \_\_\_\_\_
- e. \_\_\_\_\_

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12. What manual covers the procedures for reporting missing, lost, or stolen explosives/ammunition?

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**Feedback**

Compare your answers to the feedback provided below. If you had trouble with this self-quiz, please review the appropriate section of this assignment.

Question	Answer	Reference
1.	b	Pg. 49
2.	c	Pg. 50
3.	d	Pg. 50
4.	“FOR OFFICIAL USE ONLY”	Pg.50
5.	<p>Any three of the below items are correct.</p> <ul style="list-style-type: none"><li>• Only personnel that are essential for the completion of required operations will be authorized access.</li><li>• Personnel responsible for the security and/or custody (unaccompanied access) of explosives/ammunition are of sound character and morally responsible.</li><li>• Individuals authorized unaccompanied access shall be designated in writing by the commanding officer.</li><li>• Individuals granted access shall have a favorable National Agency Check IAW the Physical Security Manual.</li></ul>	Pg. 51
6.	c	Pg. 52
7.	<ul style="list-style-type: none"><li>• Daily</li><li>• Monthly</li><li>• Annually</li><li>• Whenever there has been or a suspected unauthorized access to storage facilities has occurred</li></ul>	Pg. 53





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Continued next page

**Feedback  
(Continued)**

The following is a continuation of the self-quiz feedback:

<b>Question</b>	<b>Answer</b>	<b>Reference</b>
8.	In the ordnance or magazine log and reported to the Weapons Petty Officer or OOD in accordance with your unit's SOP.	Pg. 53
9.	b	Pg. 54
10.	a	Pg. 54
11.	a. date of inspection/inventory b. inspection SOP used c. deficiencies detected, and deficiencies corrected d. results of inventories e. all entries shall be signed (no initials)	Pg. 55
12.	Small Arms Manual, COMDTINST M8370.11 (series)	Pg. 57

<b>Performance</b>	DIRECT handling, storage, and security of ordnance equipment.
<b>Performance Objective 1</b>	<p>Given pyrotechnics used in Coast Guard aviation and the proper handling and safety procedures, <b>DIRECT</b> pyrotechnic handling operations IAW the Small Arms Manual, COMDTINST M8370.11 (series); Pyrotechnic Screening, Marking and Countermeasure Devices Manual, SW050-AB-MMA-010; and Ammunition Ashore, Handling, Stowing and Shipping Manual, NAVSEA OP-5 (Vol. 1).</p> <p>_____ </p>
<b>Performance Objective 2</b>	<p>Given a Coast Guard air stations pyrotechnic allowance, <b>INSPECT</b> the air stations pyrotechnics storage facility for compliance with storage type and construction requirements IAW the Small Arms Manual, COMDTINST M8370.11 (series) and Ammunition Ashore, Handling, Stowing and Shipping Manual, NAVSEA OP-5 (Vol. 1).</p> <p>_____ </p>
<b>Performance Objective 3</b>	<p>Given pyrotechnics used in Coast Guard aviation and the proper stowage and safety procedures, <b>DIRECT</b> pyrotechnic stowage operations IAW the Small Arms Manual, COMDTINST M8370.11 (series); Pyrotechnic Screening, Marking and Countermeasure Devices Manual, SW050-AB-MMA-010; and Ammunition Ashore, Handling, Stowing and Shipping Manual, NAVSEA OP-5 (Vol. 1).</p> <p>_____ </p>
<b>Performance Objective 4</b>	<p>Given a Coast Guard air stations pyrotechnic storage facilities, <b>DIRECT</b> the security program that applies for that type of storage IAW the Small Arms Manual, COMDTINST M8370.11 (series) and the Coast Guard Physical Security Program COMDTINST M5530.1 (series).</p> <p>_____ </p>

## APPENDIX A, PAMPHLET REVIEW QUIZ

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1. To requisition parts, tools and materials, you would use form \_\_\_\_\_ or the unit's equivalent?
  - A. CG-4400
  - B. CG-4200
  - C. CG-4940
  - D. DD-4940
2. Which commandant instruction provides details on how to make an open market purchase?
  - A. M4000.16
  - B. M3502.14
  - C. M4200.13
  - D. M5210.5
3. An open market purchase must be set aside for a small business if the purchase price is over \_\_\_\_\_ and up to \_\_\_\_\_.
  - A. \$2,500.01, \$100,000.00
  - B. \$10,000.00, \$100,000.00
  - C. \$15,000.00, \$200,000.00
  - D. \$25,000.00, \$200,000.00
4. To make an open market purchase over \$2,500.00 and up to \$100,000.00, competitive price quotes must be obtained from how many sources, unless the vendor is a sole source?
  - A. 1
  - B. 2
  - C. 3
  - D. 4
5. Which form is used to make an open market purchase?
  - A. D.O.T. Procurement Request Process Rapidly Form
  - B. D.O.T. Small Purchase Request
  - C. CG-4315
  - D. CG-5155
6. Which component materiel condition tag is attached to a component, unserviceable or not, when special handling is required?
  - A. DD-1572
  - B. DD-1572-A
  - C. DD-1577
  - D. CG-1577-A
7. When a component is shipped without an attached UR, after how many days from the original shipment date will ARSC wait before generating a letter to the command requesting completion of the UR?
  - A. 10
  - B. 12
  - C. 14
  - D. 16
8. How often should the weapons petty officer perform a magazine material safety inspection?
  - A. Daily
  - B. Weekly
  - C. Monthly
  - D. Quarterly

## APPENDIX A, PAMPHLET REVIEW QUIZ

---

9. What instruction provides disposal procedures for pyrotechnics that have been damaged by moisture?
  - A. M8000.3
  - B. M8370.11
  - C. NAVSEA OP 5
  - D. District OPLAN
10. When should water leaking into a storage area be repaired?
  - A. Within 48 hours
  - B. Within 1 week
  - C. Immediately
  - D. After notifying the commander
11. An R/S is considered lapsed if he has not had a stan check within?
  - A. 12 months
  - B. 13 months
  - C. 15 months
  - D. 18 months
12. All in-water training safety measures are outlined in what manual?
  - A. M3710.1
  - B. M3710.2
  - C. M3710.3
  - D. M3710.4
13. How many minutes should the PT workout take?
  - A. 30
  - B. 45
  - C. 60
  - D. 90
14. What EMT practical training is required in November?
  - A. Patient Examination and Vital Signs
  - B. CPR and Oxygen Equipment review
  - C. Emergency Childbirth
  - D. None of the above
15. How often are commanding officers required to validate SDAP eligibility?
  - A. Quarterly
  - B. Semi-annually
  - C. Annually
  - D. Bi-annually
16. What determines the air station pyrotechnic allowance?
  - A. SAR load
  - B. Training load
  - C. Number and type of aircraft
  - D. All of the above

## APPENDIX A, PAMPHLET REVIEW QUIZ

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17. What is the NALC for the MK-124 flare?
- A. L258
  - B. L283
  - C. L554
  - D. L585
18. What is the NALC for the MK-25 flare?
- A. L258
  - B. L283
  - C. L554
  - D. L585
19. What form is used to order pyrotechnics
- A. CG1149
  - B. DD1149
  - C. CG1534
  - D. DD1534
20. The annual inventory ATR is required to be submitted before the first day of \_\_\_\_.
- A. January
  - B. February
  - C. March
  - D. October
21. What is a NAR?
- A. Three letter code used at the beginning of an ATR.
  - B. Naval Ammunition Reclassification
  - C. Naval Ammunition Reliability
  - D. National Ammunition Reliability
22. What does the condition code "B" represent?
- A. Ready issue
  - B. Training use only
  - C. Condemn
  - D. Await reclassification
23. What priority is normally given to ATR message traffic?
- A. Routine
  - B. Secret
  - C. Priority
  - D. FOUO
24. What does the expenditure code "C" represent?
- A. Receipts and gains in inventory
  - B. Issues to other activities
  - C. Operations
  - D. Transfer out of system

## APPENDIX A, PAMPHLET REVIEW QUIZ

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25. The term “class 265” is interchangeable with Condition code \_\_\_\_\_.  
A. F  
B. G  
C. S  
D. U
26. Following receipt of shipping orders, Type 1 materiel shall be shipped as soon as practical but not later than \_\_\_\_\_ days.  
A. 5  
B. 10  
C. 14  
D. 15
27. What type of materiel shall be used to eliminate damage to a component when tagging?  
A. Soft  
B. .020 inch safety wire  
C. Break-away wire  
D. Any material that ensures security
28. When Auxiliary Power Unit preservation procedures are not given in ACMS MPCs, which publication could be utilized?  
A. NAVSUP PUB 502  
B. NAVSUP PUB 503  
C. NAVAIR 15-01-500  
D. NA 15-02-1 (T.O. 2-1-32)
29. Machine control switches shall have all selective positions \_\_\_\_\_.  
A. detented  
B. illuminated  
C. properly identified  
D. color-coded
30. Any equipment found defective during visual inspections, or at any other time, shall be \_\_\_\_\_.  
A. removed from service for repairs  
B. used on a limited basis  
C. disposed of locally  
D. surveyed
31. All fire extinguishers shall be inspected, serviced, and maintained in accordance with \_\_\_\_\_.  
A. AFTO 00-25-172  
B. manufacturers instructions  
C. COMDTINST M13020.1 (series)  
D. COMDTINST M11000.1 (series)
32. If a static ground is mechanically damaged, it must be \_\_\_\_\_.  
A. tested annually  
B. removed  
C. repaired only  
D. repaired and re-tested

## APPENDIX A, PAMPHLET REVIEW QUIZ

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33. What manual provides general information on a Coast Guard aviation unit's shop safety program?
- A. NAVAIR 17-1-114
  - B. 29 Code of Federal Regulations
  - C. Safety and Environmental Health Manual, COMDTINST M5100.47 (series)
  - D. Aeronautical Engineering Maintenance Management Manual, COMDTINST M13020.1 (series)
34. To properly identify first aid stations within an industrial area, you should paint the first-aid station IAW which of the following publications?
- A. 29 Code of Federal Regulations
  - B. Colors and Coatings Manual, COMDTINST M10360.3
  - C. Safety and Environmental Health Manual, COMDTINST M5100.47 (series)
  - D. Aeronautical Engineering Maintenance Management Manual, COMDTINST M13020.1 (series)
35. When there is a disparity between Coast Guard safety publications and other safety publications, which publication has precedence.
- A. US Code 27.1900 (series)
  - B. 29 CFR (code of Federal Regulations)
  - C. OSHA regulations
  - D. Coast Guard safety publications
35. Coast Guard safety regulations are based on the guidelines established by \_\_\_\_\_.
- A. MSA
  - B. NISH
  - C. NFPA
  - D. OSHA
36. How are barrels filled with pyrotechnics moved?
- A. Rolled
  - B. Caterwauled
  - C. Hand trucked
  - D. Both A & C
37. What highly toxic substance is produced from a burning MK-25?
- A. Carbon Dioxide
  - B. Sulfuric gas
  - C. White phosphorous
  - D. Red phosphorous
38. When is an immediate ammunition mishap report required?
- A. Injury
  - B. Death
  - C. Loss of equipment
  - D. Both A & B
39. Who grants ready service locker siting requests?
- A. Group
  - B. District
  - C. Area
  - D. Commandant



## APPENDIX A, PAMPHLET REVIEW QUIZ

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40. What is the background color of the pyrotechnic fire hazard sign?
- A. Red
  - B. Blue
  - C. Orange
  - D. Yellow
41. How often shall unit physical security plans be reviewed?
- A. Monthly
  - B. Quarterly
  - C. Annually
  - D. Bi-annually
42. What manual provides guidelines for an ammunition storage key control program?
- A. NAVAIR 11-15-7
  - B. COMDTINST M5100.47
  - C. COMDTINST M5530.1
  - D. NAVSEA OP 5 (Vol. 1)
43. What manual cover the procedures for reporting lost or stolen ammunition?
- A. NAVSEA OP 5 (Vol. 1)
  - B. COMDTINST M8370.11
  - C. COMDTINST M5100.47
  - D. NAVAIR 11-15-7

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## **APPENDIX B, PHAMPHLET REVIEW QUIZ ANSWER KEY**

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<b>QUESTION</b>	<b>ANSWER</b>	<b>REFERENCE</b>
1.	C	6.A.02C Pg. 8
2.	C	6.A.02C Pg. 14
3.	A	6.A.02C Pg. 15
4.	C	6.A.02C Pg. 15
5.	A	6.A.02C Pg. 17
6.	D	M13020.1E Pg. 4-14
7.	C	M13020.1E PG. 4-30
8.	B	6.D.01 Pg. 39
9.	D	6.A.01 Pg. 6
10.	C	6.D.01 Pg. 6
11.	C	M3710.4A Pg. 1-2
12.	D	M3710.4A Pg. 2-1
13.	C	M3710.4A Pg. 3-3
14.	A	M3710.4A Pg. 3-5
15.	C	M3710.4A Pg. 1-3
16.	D	6.A.03 Pg. 3
17.	B	6.A.03 Pg. 4
18.	C	6.A.03 Pg. 4
19.	A	6.A.03 Pg. 5
20.	B	6.A.04 Pg. 3
21.	B	6.A.04 Pg. 4
22.	B	6.A.04 Pg. 5
23.	A	6.A.04 Pg. 5
24.	A	6.A.04 Pg. 6

## **APPENDIX B, PHAMPHLET REVIEW QUIZ ANSWER KEY**

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<b>QUESTION</b>	<b>ANSWER</b>	<b>REFERENCE</b>
25.	A	M13020.1E Pg. 7-1
26.	D	M13020.1E Pg. 7-4
27.	A	M13020.1E Pg. 7-7
28.	D	M13020.1E Pg. 7-10
29.	C	M13020.1E Pg. 12-1
30.	A	M13020.1E Pg. 12-5
31.	B	M13020.1E Pg. 12-13
32.	D	M13020.1E Pg. 12-14
33.	D	6.D.03c Pg. 3
34.	B	6.D.03c Pg. 3
35.	D	6.D.03c Pg. 6
36.	C	6.D.01 Pg. 10
37.	C	6.D.01 Pg. 13
38.	D	6.D.01 Pg. 15
39.	C	6.D.01 Pg. 30
40.	C	6.D.01 Pg. 34
41.	C	6.D.01 Pg. 50
42.	C	6.D.01 Pg. 52
43.	B	6.D.01 Pg. 57

## APPENDIX C, REFERENCES

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<b><u>Publication Number</u></b>	<b><u>Publication Name</u></b>
MSR Index ALSE	Maintenance Procedure Cards
CGTO PG-85-00-10	ACMS User's Guide
CGTO PG-85-00-20	CG-22 Process Guide
CGTO PG-85-00-40	Aeronautical Engineering TCTO Process Guide
CGTO PG-85-00-50	Technical Information Management and Ordering Systems (TIMOS)
COMDTINST M3710.1 (series)	Air Operations Manual
COMDTINST M11000.11 (series)	Civil Engineering Manual
COMDTINST M13020.1 (series)	Aeronautical Engineering Maintenance Management Manual
COMDTINST M13520.1 (series)	Aviation Life Support Systems Manual
COMDTINST M1414.8 (series)	Enlisted Qualifications Manual
COMDTINST M16478.1 (series)	Hazardous Waste Management Manual
COMDTINST M4200.13	Small Purchase Handbook
COMDTINST M4500.5	Personal, Property Management Manual
COMDTINST M5100.47 (series)	Safety and Environmental Health Manual
COMDTINST M6000.3 (series)	First Aid and Health Lesson Plans
Current Edition	The Coast Guardsman's Manual
SW050-AB-MMA-010	Pyrotechnic Screening, Marking and Countermeasure Devices Manual
MRNSPO 0458 (series)	Military Requirements For Becoming a Senior Petty Officer

## **APPENDIX C, REFERENCES**

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## APPENDIX D, STUDENT FEEDBACK FORM

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**Instructions** Please use this form for any feedback you may have concerning this course. Submit your recommendations IAW instructions on page D-2. Note: Use the reverse side of this page if more space is needed.

**How?** Note your suggestions, corrections, and comments below:

Page	Location on Page	Recommendations

**Your Comments** If you were writing this pamphlet, what improvements would you make? What was good about it? What didn't you understand?  
Please be specific in your comments/suggestions.

**To Contact You** Please provide the following information so that we can contact you if needed.

Name	Unit	Phone
		(     )

## APPENDIX D, STUDENT FEEDBACK FORM

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### **Submit Suggestions**

After completing this form please mail, FAX, or phone your information to:

Commanding Officer  
U.S. Coast Guard Aviation  
Technical Training Center  
Attn: AST Subject Matter Specialist (NRT)  
Elizabeth City, NC 27909-5003

PHONE: (252) 335-6418  
FAX: (252) 335-6103

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